

**§ 124.19 Appeal of RCRA, UIC, NPDES and PSD Permits.**

(a) *Petitioning for review of a permit decision.* (1) *Initiating an appeal.* Appeal from a RCRA, UIC, NPDES, or PSD final permit decision issued under § 124.15 of this part, or a decision to deny a permit for the active life of a RCRA hazardous waste management facility or unit under § 270.29 of this chapter, is commenced by filing a petition for review with the Clerk of the Environmental Appeals Board within the time prescribed in paragraph (a)(3) of this section.

(2) *Who may file?* Any person who filed comments on the draft permit or participated in a public hearing on the draft permit may file a petition for review as provided in this section. Additionally, any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review of any permit conditions set forth in the final permit decision, but only to the extent that those final permit conditions reflect changes from the proposed draft permit.

(3) *Filing deadline.* A petition for review must be filed with the Clerk of the Environmental Appeals Board within 30 days after the Regional Administrator serves notice of the issuance of a RCRA, UIC, NPDES, or PSD final permit decision under § 124.15 or a decision to deny a permit for the active life of a RCRA hazardous waste management facility or unit under § 270.29 of this chapter. A petition is filed when it is received by the Clerk of the Environmental Appeals Board at the address specified for the appropriate method of delivery as provided in paragraph (i)(2) of this section.

(4) *Petition contents.* (i) In addition to meeting the requirements in paragraph (d), a petition for review must identify the contested permit condition or other specific challenge to the permit decision and clearly set forth, with legal and factual support, petitioner's contentions for why the permit decision should be reviewed. The petition must demonstrate that each challenge to the permit decision is based on:

(A) A finding of fact or conclusion of law that is clearly erroneous, or

(B) An exercise of discretion or an important policy consideration that the Environmental Appeals Board should, in its discretion, review.

(ii) Petitioners must demonstrate, by providing specific citation to the administrative record, including the document name and page number, that each issue being raised in the petition was raised during the public comment period (including any public hearing) to the extent required by § 124.13. For each issue raised that was not raised previously, the petition must explain why such issues were not required to be raised during the public comment period as provided in § 124.13. Additionally, if the petition raises an issue that the Regional Administrator addressed in the response to comments document issued pursuant to § 124.17, then petitioner must provide a citation to the relevant comment and response and explain why the Regional Administrator's response to the comment was clearly erroneous or otherwise warrants review.

(b) *Response(s) to a petition for review.* (1) In a PSD or other new source permit appeal, the Regional Administrator must file a response to the petition for review, a certified index of the administrative record, and the relevant portions of the administrative record within 21 days after the filing of the petition.

(2) In all other permit appeals under this section, the Regional Administrator must file a response to the petition, a certified index of the administrative record, and the relevant portions of the administrative record within 30 days after the filing of a petition.

(3) A permit applicant who did not file a petition but who wishes to participate in the appeal process must file a notice of appearance and a response to the petition. Such documents must be filed by the deadlines provided in paragraph (b)(1) or (2) of this section, as appropriate.

(4) The State or Tribal authority where the permitted facility or site is or is proposed to be located (if that authority is not the permit issuer) must also file a notice of appearance and a response if it wishes to participate in the appeal. Such response must be filed by the deadlines provided in paragraph (b)(1) or (2) of this section, as appropriate.

(c) *Replies.* (1) In PSD and other new source permit appeals, the Environmental Appeals Board will apply a presumption against the filing of a reply brief. By motion, petitioner may seek leave of the Environmental Appeals

Board to file a reply to the response, which the Environmental Appeals Board, in its discretion, may grant. The motion must be filed simultaneously with the proposed reply within 10 days after service of the response. In its motion, petitioner must specify those arguments in the response to which petitioner seeks to reply and the reasons petitioner believes it is necessary to file a reply to those arguments. Petitioner may not raise new issues or arguments in the motion or in the reply.

(2) In all other permit appeals under this section, petitioner may file a reply within 15 days after service of the response. Petitioner may not raise new issues or arguments in the reply.

(d) *Content and form of briefs.* (1) *Content requirements.* All briefs filed under this section must contain, under appropriate headings:

- (i) A table of contents, with page references;
- (ii) A table of authorities with references to the pages of the brief where they are cited;
- (iii) A table of attachments, if required under paragraph (d)(2) of this section; and
- (iv) A statement of compliance with the word limitation.

(2) *Attachments.* Parts of the record to which the parties wish to direct the Environmental Appeals Board's attention may be appended to the brief submitted. If the brief includes attachments, a table must be included that provides the title of each appended document and assigns a label identifying where it may be found (e.g., Excerpts from the Response to Comments Document \* \* \* Attachment 1).

(3) *Length.* Unless otherwise ordered by the Environmental Appeals Board, petitions and response briefs may not exceed 14,000 words, and all other briefs may not exceed 7,000 words. Filers may rely on the word-processing system used to determine the word count. In lieu of a word limitation, filers may comply with a 30-page limit for petitions and response briefs, or a 15-page limit for replies. Headings, footnotes, and quotations count toward the word limitation. The table of contents, table of authorities, table of attachments (if any), statement requesting oral argument (if any), statement of compliance with the word limitation, and any attachments do not count toward the word limitation. The Environmental Appeals Board may exclude any petition, response, or other brief that does not meet word limitations. Where a party can demonstrate a compelling and documented need to exceed such limitations, such party must seek advance leave of the Environmental Appeals Board to file a longer brief. Such requests are discouraged and will be granted only in unusual circumstances.

(e) *Participation by amicus curiae.* Any interested person may file an amicus brief in any appeal pending before the Environmental Appeals Board under this section. The deadline for filing such brief is 15 days after the filing of the response brief, except that amicus briefs in PSD or other new source permit appeals must be filed within 21 days after the filing of the petition. Amicus briefs must comply with all procedural requirements of this section.

(f) *Motions.* (1) *In general.* A request for an order or other relief must be made by written motion unless these rules prescribe another form.

(2) *Contents of a motion.* A motion must state with particularity the grounds for the motion, the relief sought, and the legal argument necessary to support the motion. In advance of filing a motion, parties must attempt to ascertain whether the other party(ies) concur(s) or object(s) to the motion and must indicate in the motion the attempt made and the response obtained.

(3) *Response to motion.* Any party may file a response to a motion. Responses must state with particularity the grounds for opposition and the legal argument necessary to support the motion. The response must be filed within 15 days after service of the motion unless the Environmental Appeals Board shortens or extends the time for response.

(4) *Reply.* Any reply to a response filed under paragraph (f)(3) of this section must be filed within 10 days after service of the response. A reply must not introduce any new issues or arguments and may respond only to matters presented in the response.

(5) *Disposition of a motion for a procedural order.* The Environmental Appeals Board may act on a motion for a procedural order at any time without awaiting a response.

(g) *Timing of motions for extension of time.* Parties must file motions for extensions of time sufficiently in advance of the due date to allow other parties to have a reasonable opportunity to respond to the request for more time and to provide the Environmental Appeals Board with a reasonable opportunity to issue an order.

(h) *Oral argument.* The Environmental Appeals Board may hold oral argument on its own initiative or at its discretion in response to a request by one or more of the parties. To request oral argument, a party must include in its substantive brief a statement explaining why oral argument should be permitted. The Environmental Appeals Board will apply a presumption against oral argument in PSD or other new source permit appeals. The Environmental Appeals Board may, by order, establish additional procedures governing any oral argument before the Environmental Appeals Board.

(i) *Filing and service requirements.* Documents filed under this section, including the petition for review, must be filed with the Clerk of the Environmental Appeals Board. A document is filed when it is received by the Clerk of the Environmental Appeals Board at the address specified for the appropriate method of delivery as provided in paragraph (i)(2) of this section.

(1) *Caption and other filing requirements.* Every document filed with the Environmental Appeals Board must specifically identify in the caption the permit applicant, the permitted facility, and the permit number. All documents that are filed must be signed by the person filing the documents or the representative of the person filing the documents. Each filing must also indicate the signer's name, address, and telephone number, as well as an email address, and facsimile number, if any.

(2) *Method of filing.* Unless otherwise permitted under these rules, documents must be filed either electronically, by mail, or by hand delivery. In addition, a motion or a response to a motion may be submitted by facsimile if the submission contains no attachments. Upon filing a motion or response to a motion by facsimile, the sender must, within one business day, submit the original copy to the Clerk of the Environmental Appeals Board either electronically, by mail, or by hand-delivery.

(i) *Electronic filing.* Documents that are filed electronically must be submitted using the Environmental Appeals Board's electronic filing system, subject to any appropriate conditions and limitations imposed by order of the Environmental Appeals Board. All documents filed electronically must include the full name of the person filing below the signature line. Compliance with Environmental Appeals Board electronic filing requirements constitutes compliance with applicable signature requirements.

(ii) *Filing by U.S. Mail.* Documents that are sent by U.S. Postal Service (except by U.S. Express Mail) must be sent to the official mailing address of the Clerk of the Environmental Appeals Board at: U.S. Environmental Protection Agency, Environmental Appeals Board, 1200 Pennsylvania Avenue NW., Mail Code 1103M, Washington, DC 20460-0001. The original and two copies of each document must be filed. The person filing the documents must include a cover letter to the Clerk of the Environmental Appeals Board clearly identifying the documents that are being submitted, the name of the party on whose behalf the documents are being submitted, as well as the name of the person filing the documents, his or her address, telephone number and, if available, fax number and email address.

(iii) *Filing by hand delivery.* Documents delivered by hand or courier (including deliveries by U.S. Express Mail) must be delivered to the Clerk of the Environmental Appeals Board at: U.S. Environmental Protection Agency, Environmental Appeals Board, EPA East Building, 1201 Constitution Avenue NW., Room 3334, Washington, DC 20004. The original and two copies of each document must be filed. The person filing the documents must include a cover letter to the Clerk of the Environmental Appeals Board clearly identifying the documents being submitted, the name of the party on whose behalf the documents are being submitted, as well as the name of the person filing the documents, his or her address, telephone number and, if available, fax number and email address.

(3) *Service requirements.* Petitioner must serve the petition for review on the Regional Administrator and the permit applicant (if the applicant is not the petitioner). Once an appeal is docketed, every document filed with the Environmental Appeals Board must be served on all other parties. Service must be by first class mail, or by any reliable commercial delivery service. Upon agreement by the parties, service may be made by facsimile or electronic means.

(4) *Proof of service.* A certificate of service must be appended to each document filed stating the names of persons served, the date and manner of service, as well as the electronic, mailing, or hand delivery address, or facsimile number, as appropriate.



(j) *Withdrawal of permit or portions of permit by Regional Administrator.* The Regional Administrator, at any time prior to 30 days after the Regional Administrator files its response to the petition for review under paragraph (b) of this section, may, upon notification to the Environmental Appeals Board and any interested parties, withdraw the permit and prepare a new draft permit under § 124.6 addressing the portions so withdrawn. The new draft permit must proceed through the same process of public comment and opportunity for a public hearing as would apply to any other draft permit subject to this part. Any portions of the permit that are not withdrawn and that are not stayed under § 124.16(a) continue to apply. If the Environmental Appeals Board has held oral argument, the Regional Administrator may not unilaterally withdraw the permit, but instead must request that the Environmental Appeals Board grant a voluntary remand of the permit or any portion thereof.

(k) *Petitioner request for dismissal of petition.* Petitioner, by motion, may request to have the Environmental Appeals Board dismiss its appeal. The motion must briefly state the reason for its request.

(l) *Final disposition and judicial review.* (1) A petition to the Environmental Appeals Board under paragraph (a) of this section is, under 5 U.S.C. 704, a prerequisite to seeking judicial review of the final agency action.

(2) For purposes of judicial review under the appropriate Act, final agency action on a RCRA, UIC, NPDES, or PSD permit occurs when agency review procedures under this section are exhausted and the Regional Administrator subsequently issues a final permit decision under this paragraph. A final permit decision must be issued by the Regional Administrator:

(i) When the Environmental Appeals Board issues notice to the parties that the petition for review has been denied;

(ii) When the Environmental Appeals Board issues a decision on the merits of the appeal and the decision does not include a remand of the proceedings; or

(iii) Upon the completion of remand proceedings if the proceedings are remanded, unless the Environmental Appeals Board's remand order specifically provides that appeal of the remand decision will be required to exhaust administrative remedies.

(3) The Regional Administrator must promptly publish notice of any final agency action regarding a PSD permit in the FEDERAL REGISTER .

(m) *Motions for reconsideration or clarification.* Motions to reconsider or clarify any final disposition of the Environmental Appeals Board must be filed within 10 days after service of that order. Motions for reconsideration must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for clarification must set forth with specificity the portion of the decision for which clarification is being sought and the reason clarification is necessary. Motions for reconsideration or clarification under this provision must be directed to, and decided by, the Environmental Appeals Board. Motions for reconsideration or clarification directed to the Administrator, rather than the Environmental Appeals Board, will not be considered, unless such motion relates to a matter that the Environmental Appeals Board has referred to the Administrator pursuant to § 124.2 and for which the Administrator has issued the final order. A motion for reconsideration or clarification does not stay the effective date of the final order unless the Environmental Appeals Board specifically so orders.

(n) *Board authority.* In exercising its duties and responsibilities under this part, the Environmental Appeals Board may do all acts and take all measures necessary for the efficient, fair, and impartial adjudication of issues arising in an appeal under this part including, but not limited to, imposing procedural sanctions against a party who, without adequate justification, fails or refuses to comply with this part or an order of the Environmental Appeals Board. Such sanctions may include drawing adverse inferences against a party, striking a party's pleadings or other submissions from the record, and denying any or all relief sought by the party in the proceeding. Additionally, for good cause, the Board may relax or suspend the filing requirements prescribed by these rules or Board order.

(o) *General NPDES permits.* (1) Persons affected by an NPDES general permit may not file a petition under this section or otherwise challenge the conditions of a general permit in further Agency proceedings. Instead, they may do either of the following:

(i) Challenge the general permit by filing an action in court; or

(ii) Apply for an individual NPDES permit under § 122.21 as authorized in § 122.28 of this chapter and may then petition the Environmental Appeals Board to review the individual permit as provided by this section.

(2) As provided in § 122.28(b)(3) of this chapter, any interested person may also petition the Director to require an individual NPDES permit for any discharger eligible for authorization to discharge under an NPDES general permit.

(p) The Environmental Appeals Board also may decide on its own initiative to review any condition of any RCRA, UIC, NPDES, or PSD permit decision issued under this part for which review is available under paragraph (a) of this section. The Environmental Appeals Board must act under this paragraph within 30 days of the service date of notice of the Regional Administrator's action.

[78 FR 5285, Jan. 25, 2013]



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 1

-----  
STATE OF MICHIGAN  
IN THE COUNTY OF JACKSON  
-----

PUBLIC COMMENT ON PROPOSED  
CLASS II PERMIT  
UNDERGROUND INJECTION WELL  
WEST BAY EXPLORATION COMPANY  
-----

PUBLIC HEARING  
May 23, 2012 - 7:00 p.m.  
Brooklyn, Michigan  
Dana Rzeznik, EPA Hearing Officer

FINAL COPY  
JANE ROSE REPORTING 1-800-825-3341

JANE ROSE REPORTING  
1-800-825-3341

National Court-Reporting Coverage  
[janerosereporting.com](http://janerosereporting.com)

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 2

APPEARANCES

Dana Rzeznik, EPA Hearing Officer  
Anna Miller, EPA Scientist  
Jeffrey Wawczak, EPA Scientist  
Timothy Elkins, EPA Scientist  
Jennifer Ostermeier, EPA Hearing Facilitator  
Peter Cassell, EPA Public Affairs

JANE ROSE REPORTING

80 Fifth Avenue  
New York, New York 10011  
1-800-825-3341  
Mindy Womack, Court Reporter

JANE ROSE REPORTING  
1-800-825-3341

National Court-Reporting Coverage  
[janerosereporting.com](http://janerosereporting.com)



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 3

1 MS. RZEZNIK: Will the hearing come to order  
2 please. Good evening. Welcome! I am Dana Rzeznek,  
3 I'm an Environmental Engineer with the United States  
4 Environmental Protection Agency, and tonight I am the  
5 Hearing Officer, representing EPA for this public  
6 hearing. With me are: Anna Miller, an environmental  
7 scientist with EPA and author of the draft underground  
8 injection control permit; Jeffrey Wawczak, an EPA  
9 environmental scientist; Timothy Elkins, also an EPA  
10 environmental scientist, Jennifer Ostermeier, EPA  
11 hearing facilitator and Peter Cassell from the EPA  
12 office of Public Affairs. We are here to listen to  
13 your comments regarding a permit EPA has proposed to  
14 issue to West Bay Exploration Company for a Class II  
15 injection well located in Jackson County, Michigan.

16 The permit which is the subject of tonight's  
17 hearing is being issued pursuant to the Federal  
18 Underground Injection Control Program for the State of  
19 Michigan, which may be found in the Code of Federal  
20 Regulations at Title 40, Section 147.1151. This  
21 section was promulgated pursuant to Part C of the Safe  
22 Drinking Water Act. It incorporates the Underground  
23 injection Control Program requirements of Part 124, 144  
24 and 146 of the Code of Federal Regulations. The  
25 effective date of this program in Michigan was June 25,

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 4

1 1984.

2 The Underground Injection Control of UIC  
3 Program is designed to protect underground sources of  
4 drinking water by permitting only those injection wells  
5 which meet stringent technical requirements. The  
6 program is also designed to ensure public participation  
7 in the permitting process. The public is invited to  
8 comment on every proposed permit decision. EPA holds  
9 public hearings for those draft permit decisions that  
10 generate significant public interest or comments.

11 The proposed permit which is the subject of  
12 tonight's hearing is a Class II injection well. Anna  
13 Miller will describe the well and the safeguards  
14 provided to protect the environment. An announcement  
15 of this public hearing was made in the Jackson  
16 Citizen-Patriot, April 17, 2012 and was mailed to those  
17 who provided comments.

18 Now, a little bit about the nature of a  
19 public hearing. Public hearings provide members of the  
20 public with an opportunity to publicly make EPA aware  
21 of their views on an intended regulatory action.  
22 Although oral presentations are recorded word for word  
23 by a court reporter, there is no sworn testimony or  
24 cross-examination. This is your opportunity to tell us  
25 officially whether you feel the terms of the permit are

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 5

1 consistent with EPA's Underground Injection Control  
2 Program requirements and whether the facts, as EPA has  
3 determined them, are accurate. During the comments  
4 portion of this hearing we will listen to them only.  
5 We will not respond to these comments this evening.  
6 All comments received will be reviewed and addressed in  
7 a responsiveness summary to be added to the permit  
8 Administrative Record.

9 EPA will consider all comments in making its  
10 decision to issue or deny this UIC permit for West Bay  
11 Exploration Company. You may appeal any technical  
12 details or qualifications of the final permit decision  
13 only if you submit written comments on the draft permit  
14 during the public comment period or if you make a  
15 statement in this hearing tonight. If you wish to make  
16 a statement at this hearing, please be sure that you  
17 have filled in a registration form so that we may  
18 correctly enter your name into the hearing record.  
19 Even if you don't choose to make a statement, but want  
20 to receive a copy of any response and the final permit  
21 decision, make sure that you have indicated so on the  
22 sign-in sheet at the sign-in table.

23 Copies of the transcript of this hearing as  
24 well as all written comments submitted in this  
25 proceeding will be maintained at the EPA, Region 5

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 6

1 offices in Chicago and will become part of the  
2 Administrative Record. The transcript of this meeting  
3 and a copy of the responsiveness summary of comments  
4 received, will also be available for your review at the  
5 Jackson District Library 244 W. Michigan Jackson,  
6 Michigan. These documents will also be available on  
7 EPA website at  
8 <http://www.epa.gov/region5/water/uic/uicpub.htm>.

9 The public comment period has been extended  
10 through June 1 so that if you have written statements  
11 upon the conclusion of the hearing, you may also  
12 forward those to EPA, at the address in the Public  
13 Notice which has been provided.

14 First Ms. Miller will read her statement into  
15 the record. Ms. Ostermeier will then begin calling on  
16 those who have checked on their registration form that  
17 they would like to make a statement and have it  
18 transcribed by the court reporter. Now, I will turn  
19 the floor over to Ms. Anna Miller.

20 MS. MILLER: Good evening. My name is Anna  
21 Miller. I am an environmental scientist with the  
22 United States Environmental Protection Agency in  
23 Chicago, Illinois.

24 I am the permit writer of the draft permit  
25 for the West Bay #22 proposed well. I am here today to

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 7

1 listen to comments on a permit to inject fluid  
2 underground through a well for waste disposal purposes.

3 EPA proposes to issue a permit to West Bay  
4 Exploration Company under the Federal Underground  
5 Injection Control Program for the State of Michigan.

6 The Federal Underground Injection Control  
7 Program is a part of the Federal Safe Drinking Water  
8 Act. Regulations for the Safe Drinking Water Act  
9 impose technical requirements on injection wells to  
10 protect underground sources of drinking water.

11 The scope of the Federal Underground  
12 Injection Control Program is to determine the soundness  
13 of construction and operation of injection wells as  
14 they relate to protection of all underground sources of  
15 drinking water. An underground source of drinking  
16 water is defined in the Safe Drinking Water Act is a  
17 aquifer or its portion which contains less than 10,000  
18 milligrams per liter of total dissolved solids. This  
19 includes current sources of drinking water, as well as  
20 potential sources of drinking water.

21 The permit which is the subject of today's  
22 hearing is a Class II disposal injection well permit  
23 for the proposed West Bay #22 well. The proposed  
24 injection well would be used to inject fluids that  
25 result from the production of oil and gas into the



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 8

1 ground for disposal. These fluids are commonly called  
2 brine. The well would inject fluids from the West Bay  
3 Exploration Company's production wells. The total  
4 depth of the well would be 2,950 feet.

5 EPA reviewed the geology of the area, the  
6 construction records of nearby existing deep wells, and  
7 the proposed well construction and well operation data.

8 The base of the lowermost possible  
9 underground source of drinking water in the vicinity of  
10 the injection well has been identified as the Marshall  
11 Sandstone located about 226 feet below ground surface.

12 The injection zone is limited by the permit  
13 to the Niagara Group in the interval between 2662 and  
14 3032 feet below ground surface.

15 The Niagara Group injection zone is separated  
16 for the lowermost underground source of drinking water  
17 by a confining layer and approximately 2436 feet of  
18 shales, limestones and various other rock formations.

19 The confining zone will serve to prevent the  
20 injection fluid from migrating upward out of the  
21 injection zone.

22 The well will be constructed to prevent the  
23 movement of fluid into or between the deepest  
24 underground sources of drinking water. It will be  
25 fully encased and cemented to the surface. Injection

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 9

1 will take place through tubing, which is set within the  
2 steel casing. A packer will be set at the bottom of  
3 the tubing to seal off the space between the casing and  
4 tubing, which will be filled with a liquid mixture  
5 containing a corrosion inhibitor, and will allow the  
6 pressure in the space to be monitored.

7 The injection pressure will be limited to 682  
8 pounds per inch gauge. This limitation will ensure  
9 that the injection pressure will not cause injection  
10 formation -- injection or formation fluid to move into  
11 underground sources of drinking water. The permit  
12 would also limit the injected fluid to brine.

13 The West Bay Exploration Company may not  
14 start drilling or constructing the injection well until  
15 a final permit has been issued. Before EPA authorizes  
16 the company to inject, West Bay Exploration Company  
17 must conduct and pass a mechanical integrity test; that  
18 is, the pressure in the space between the tubing and  
19 the casing is monitored and tested before operation to  
20 make sure there are no leaks.

21 If West Bay Exploration Company is issued the  
22 permit, they will be responsible for observing and  
23 recording: Injection pressure, flow rate, annulus  
24 pressure, and cumulative injected volume on a weekly  
25 basis and will report this information to EPA on a

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 10

1 monthly basis.

2 West Bay Exploration Company will also be  
3 responsible for observing, recording and reporting  
4 annulus liquid loss on a quarterly basis. They must  
5 also submit an analysis of injected fluid on an annual  
6 basis.

7 They must test for mechanical integrity every  
8 five years thereafter as long as the well is operating.  
9 The tests are witnessed by EPA representative.

10 West Bay Exploration Company has demonstrated  
11 adequate financial responsibilities to close, plug, and  
12 abandon this injection well. A state bond in the  
13 amount \$25,000 has been established for this purpose.

14 Now it is your opportunity to tell us your  
15 comments on the proposed permit.

16 EPA will consider all comments in making its  
17 decision to issue or deny this underground injection  
18 control permit to West Bay Exploration Company.

19 Jennifer?

20 MS. OSTERMEIER: I have a list of the folks  
21 who are interested in making a formal public comment  
22 this evening. What I would like for folks to do is I'm  
23 going to call two names at one time. The first name  
24 I'd like to go to this microphone, and the second, just  
25 come here and sit so that we can make this as quick as

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 11

1 possible and we can make sure to get everybody's  
2 comments this evening.

3 We are going to -- we have about 30 to 35  
4 commenters this evening, so I'm going to try to limit  
5 those public comments to four minutes, which should get  
6 us out of here approximately 9:00. So that's the first  
7 thing.

8 The second thing is, when you do come up to  
9 make your public comments, please state your name and  
10 spell your name for the court reporter so that we can  
11 make sure that your comment is attributed to you.

12 That being said, these names are in no  
13 particular order so if the first person would come up.  
14 Victoria Powell, please come to this microphone, and  
15 then that would be followed by Pamela Johnson.  
16 Victoria? Pamela? Okay.

17 MR. POWELL: Victoria Powell,  
18 V-I-C-T-O-R-I-A, P-O-W-E-L-L. I'm a resident of  
19 Lenawee County. I'm a pediatrician. I listened to the  
20 comments and questions in the first half of the  
21 meeting, and I'm struck by the fact that I witnessed  
22 that a member from the DEQ was laughing during part of  
23 this. The second person was sleeping during part of  
24 our very important comment session. That disturbs me,  
25 and it disturbs me because the DEQ is the department in

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 12

1       our state that allows permits for gas and oil drilling  
2       in our state. And Hal Fitch didn't come but he is  
3       notorious for saying that as a single deciding person,  
4       he allows these permits to take place after an  
5       environmental impact assessment is done. The industry  
6       does the assessment. I really don't know if he's ever  
7       denied permits, to be honest with you.

8               But what disturbs me further is that the  
9       questions that have come up tonight, we seem to know  
10      more the answers and the information than the  
11      responders. How can that be? I mean we rely on people  
12      who are educated and knowledgeable and are supposed to  
13      be informed, and we only are here to help them help us.

14             Injection wells are serious business, and  
15      it's my particular concern that we did not discuss the  
16      risks that are involved with injection wells. There is  
17      approximately 13% leakage or contamination of water  
18      from injection wells that have already been placed in  
19      the state. Many of you know Dr. Grobbel who appeared  
20      about a month ago, gave us very important information  
21      about the seriousness of injection wells.

22             And we did not address really the upward  
23      migration of contaminated toxic brine solution that is  
24      going to be going into the injection wells. Nobody  
25      seems to know how far it will spread. Nobody knows how



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 13

1 it's going to really be alerting the public if there is  
2 a contamination. And I just want to know why don't  
3 they know this stuff? Why don't we know it? Why can't  
4 we know it. I feel that we're getting railroaded and  
5 forced to accept more and more what the oil and gas  
6 industry is in charge of. They gain everything, and we  
7 gain very little.

8 I think that everyone is aware of what  
9 happened to Kalamazoo River, and that would have been  
10 January 25th, 2010. To date it has not been cleared,  
11 and this is a perfect example of how measuring pressure  
12 and the system fails. It took 20 hours with altered  
13 pressure readings in the ruptured pipe before anyone  
14 came and shut the oil flow off. And to this very day,  
15 we still have horrible contamination of one of the  
16 major rivers in our state.

17 I think that if nothing else comes out of  
18 this, I would ask members of the EPA to please find out  
19 some of the answers that we were looking for that we  
20 did not receive tonight, and to be as concerned as we  
21 are. Thank you.

22 MS. OSTERMEIER: Pamela Johnson. Next would  
23 be Judy Botte.

24 MS. JOHNSON: My name is Pamela Johnson,  
25 P-A-M-E-L-A, J-O-H-N-S-O-N. I'm Norvell Township

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 14

1 trustee. My question -- my comment is why does EPA  
2 grant permits for practices that could be so  
3 potentially damaging to our environment based on  
4 information provided by the permit applicant without  
5 doing their own environmental impact study? It is  
6 scary that everything that we do is very close to  
7 water. If anything contaminates our water sources, our  
8 entire area will be tremendously damaged. This needs  
9 to be considered. Thank you.

10 MS. OSTERMEIER: Thank you. Tim Porter will  
11 be after Judy.

12 MS. BOTTE: My name is Judy Botte, B-O-T-T-E.  
13 My question is what it was a while ago. If you don't  
14 know how far the contaminants are going to be  
15 spreading, why would you authorize a permit that is  
16 close to the Raisin River? That doesn't make sense to  
17 me at all. Thank you.

18 MS. OSTERMEIER: Thank you. Tim Porter.  
19 After Tim the next person is Peter Bormuth.

20 MS. PORTER: I'd just like to say that at the  
21 end of the day, my family and I both will be within a  
22 mile radius of the seawall injector. You don't seem to  
23 even know for sure definite answers, but you're  
24 qualified to approve it. I can't accept that.

25 MS. OSTERMEIER: Peter Bormuth is next.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 15

1 After him, Pam Anderson.

2 MR. BORMUTH: Hi. I have a number of  
3 comments. The first is a factual inaccuracy on the  
4 application by West Bay. They state that Donald and  
5 Elaine Orvos are the owners of a property at 12536 Ladd  
6 Road, and real estate summary sheets say the owners are  
7 Lawrence and Wanda Holcomb at 12536 Ladd Road. Now  
8 this may just be a clerical error. On the other hand,  
9 it's possible that Mr. Lawrence Holcomb is opposed to  
10 this well and has been deliberately denied from being  
11 placed on this sheet, appendix 1P22 submitted by West  
12 Bay Oil Exploration to the EPA.

13 I have a second comment that I would like to  
14 make the EPA themselves on the fact sheet for this well  
15 admits that, "common constituents found brines may --  
16 oil field brines may contain various amounts of  
17 hydrocarbons such as benzene, ethylbenzene, Toluene,  
18 Xylene, Naphthalene, and polycyclic aromatic  
19 hydrocarbons.

20 I'd like the people here to know what the  
21 toxicity of these substances is. This is from the  
22 medical dictionary. Benzene is conclusively known as a  
23 human carcinogen and a notorious cause of bone marrow  
24 failure. Vast quantities of epidemiological clinical  
25 and laboratory data linked Benzene to aplastic anemia,

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 16

1 acute leukemia, kidney cancer and bone marrow  
2 abnormalities. It's also been linked to neuro birth  
3 defects and spina bifida.

4 Ethylbenzene exposure can irritate the eyes,  
5 nose and throat. Very high levels can cause paralysis,  
6 trouble breathing and death. High exposure may also  
7 damage the liver and chronic long-term effects can last  
8 for months or years.

9 Toluene, I may BE pronouncing that wrong, I'm  
10 sorry. Exposure is associated with effects such as:  
11 Psychoorganic syndrome; visual evoked potential, toxic  
12 polyneuropathy, optic atrophy, brain lesions,  
13 cerebellar, cognitive, and pyramidal dysfunctions. Low  
14 to moderate levels can cause tiredness, confusion,  
15 weakness, drunken-type actions, memory loss, nausea and  
16 loss of appetite, hearing and color vision.

17 Xylene is an irritant of the eyes and mucus  
18 membranes IN concentrations below 200 ppm. Ingestion  
19 of xylene causes gastrointestinal distress, disturbance  
20 of liver and kidney function, and may cause toxic  
21 hepatitis. Chronic exposure can cause central nervous  
22 system depression, anemia, mucosal hemorrhage, bone  
23 marrow hyperplasia, liver enlargement, and liver  
24 necrosis.

25 Naphthalene is classified as possibly

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 17

1 carcinogenic to humans and may damage or destroy red  
2 blood cells. Exposure may cause confusion, nausea,  
3 vomiting, diarrhea, cataracts, blood in urine and  
4 jaundice. Under California's Proposition 65,  
5 Naphthalene is listed as known to the state to cause  
6 cancer.

7 Polycyclic aromatic hydrocarbons are known  
8 for their carcinogenic, mutagenic and teratogenic  
9 properties. Prenatal exposure is associated with lower  
10 IQ and childhood asthma. The Center for the Children's  
11 Environmental Health reports that exposure to PAH  
12 during pregnancy is related to adverse birth outcomes  
13 including low birth weight, premature delivery, and  
14 heart malformations. These are not benign chemicals.

15 Plaintiffs would also like -- I'd also like  
16 to point out that these wells have caused aquifer and  
17 well contamination in other states. The Texas Railroad  
18 Commission, which oversees oil exploration and waste  
19 injection wells in Texas, has received thousands of  
20 complaints over the years from individual landowners.  
21 Complaints that come from 85 different counties, almost  
22 all alleging groundwater contamination by sodium and  
23 waste hydrocarbons.

24 Officials in Chico, Texas wrote letters to  
25 the Railroad Commission asking for stronger regulations



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 18

1 and increased monitoring to protect their water wells.  
2 They were ignored. And in 2005 fluids from the Class  
3 II well came bubbling to the surface and other nearby  
4 water wells outside the quarter mile radius around the  
5 injection well.

6 Plaintiffs would like to point out that Anna  
7 Miller said that the bond of this well is \$25,000.  
8 It's bond number 08937735 Fidelity Deposit Company of  
9 Maryland. This bond is completely insufficient even  
10 dealing with the problems around a quarter mile acre  
11 radius if you surround this well. The properties, the  
12 SEV value of those properties from Jackson County is  
13 \$1,451,920. Should a surface water contamination issue  
14 arise, it's reasonable to expect the contamination to  
15 effect Vineyard Lake and the Raisin River. I'd like to  
16 note that lakefront properties alone, not including  
17 subdivision behind it 342 parcels on Vineyard Lake, are  
18 worth SEV 25 million dollars.

19 I'd also like to point out that the Ohio  
20 Department of Natural Resources recently closed one of  
21 these wells in the Youngstown area because it had  
22 caused 12 different low magnitude earthquakes. The  
23 report from the Ohio DNR concludes that a fault must  
24 already exist in a crystalline basement rock. The  
25 fault must be in near-failure state of stress; that an

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 19

1 injection well must be drilled deep enough and near  
2 enough to the fault and have a path of communication to  
3 the fault; and that the well must inject a sufficient  
4 quantity of fluid at a high enough pressure for an  
5 adequate period of time to cause failure.

6 The Ohio DNR report concluded that the  
7 Northstar Class II injection well caused the  
8 earthquakes in the Youngstown area, and they decided  
9 that they would require a number of reforms in the  
10 permitting process, including a complete suite of  
11 geophysical logs, including, at a minimum, gamma ray,  
12 compensated density, neutron, and resistivity logs.  
13 I'd like those to also be conducted here in the state.

14 I'd also like the EPA to take notice of the  
15 Indiana bat is in this area, and that they must be  
16 respected because they're on the Federal Endangered  
17 List.

18 And finally, I want to talk about the geology  
19 of this site, which is the most important factor. West  
20 Bay's application states that the upper confining zone  
21 evaporite at depths of 2634 feet to 2066 feet. The  
22 description of this is Anhydrite, dense, hard, white,  
23 an excellent barrier to flow. Geologists rate mineral  
24 hardness according to Moh's hardness scale, which shows  
25 Anhydrite to be a 3.5 on a scale of 10. The truth is

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 20

1       that Anhydrite is relatively soft, weak and easily  
2       formed. It's also a geological fact, Miss Miller, that  
3       Anhydrite upon exposure to water turns into gypsum,  
4       which is the second softest material on the Moh's scale  
5       and is basically porous and solvent in water, and  
6       salinity adds to this effect. It lowers the  
7       temperature at which the transition must take place.

8               I would like to suggest that EPA is guilty of  
9       gross negligence for permitting this well. Anhydrite  
10      will not cap it. Within 30 years, all of that fluid  
11      will come bubbling to the surface, and I've already  
12      told you what those chemicals will do to you, and your  
13      children, and your grandchildren. Thank you.

14             My name is Peter Bormuth, and it's spelled  
15      B-O-R-M-U-T-H, just so you don't remove my comments  
16      from the record.

17             MS. ANDERSON: Okay. That's really hard to  
18      follow.

19             My name is Pam Anderson, P-A-M,  
20      A-N-D-E-R-S-O-N. And my comments are I am very, very  
21      appalled with the EPA. First of all, I'm very appalled  
22      that you do not even bother to make the chemical  
23      composition of the brine made public. And every time  
24      West Bay was asked, it's their secret ingredients. I'm  
25      very disappointed that that has never been brought out

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 21

1 to the surface.

2 Also, how simple would it be to require them  
3 to have a monitoring well, because you don't even know  
4 how far down it's going to spread, don't know how wide  
5 it's going to spread? A monitoring well would help  
6 relieve a lot of people's minds knowing that it is not  
7 coming to the surface, knowing that it is not spreading  
8 either direction where it's not supposed to be. Thank  
9 you.

10 MS. OSTERMEIER: Holly Taylor followed by  
11 Pamela Bacon.

12 MS. TAYLOR: My name is Holly Taylor,  
13 H-O-L-L-Y, T-A-Y-L-O-R. I would like to request that  
14 in the event that this Class II injection well is  
15 reclassified, which I understand happens sometimes,  
16 that some forum, public forum, some forum be devised  
17 for a public forum, a hearing on that reclassification  
18 before it's allowed to go through. The EPA is the only  
19 one who can do this, and you need to come up with a  
20 mechanism and assure us that that mechanism is going to  
21 work. Thank you.

22 MS. OSTERMEIER: Pamela Bacon, followed Adam  
23 G. Ulbin.

24 MS. BACON: My name is Pamela Bacon,  
25 P-A-M-E-L-A, B-A-C-O-N. May 2010 St. Joseph Church we

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 22

1 had a first town hall forum. Walter from the DEQ  
2 visited. He told us specifically that we would not  
3 have any radioactive or hazardous waste from any of the  
4 drilling that was taking place in our area; that it  
5 would be definitely transported to an EPA approved  
6 site, not in the Irish Hills. My question is, what  
7 prompted this change that we are now having to be faced  
8 with two of them, one on Palmer Road, one on the Ladd/  
9 Bettis area?

10 Number two, I'd like to understand too if we  
11 are now the top producer, the Irish Hills, top producer  
12 of oil and gas -- let me change that. We are of oil.  
13 Top is the one producer in Michigan. We have right now  
14 42, 45 wells in production. We are slated for another  
15 40, what I've heard. We had two injection wells. I  
16 was told that out of that 45 wells, two injection wells  
17 were needed to put the waste. That means that we have  
18 another 40-some odd wells coming in. That means we are  
19 now obviously going to be faced with more injection  
20 wells.

21 I would hope that we would be told this way  
22 before we were -- the's fees that we're now being laid  
23 with on Palmer and on Ladd. Again, we were not even  
24 aware of that in this community. It was by pure luck  
25 that this information came out so that our community



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 23

1 could talk about this tonight. So that's it. Thank  
2 you.

3 MS. OSTERMEIER: Adam Ulbin, and he will be  
4 followed by Art Botte.

5 MS. ALDEN: Adam Ulbin, supervisor Norvell  
6 Township spelled U-L-B-I-N.

7 Michigan has four of the largest rivers that  
8 pass through Jackson County. We have Grand River  
9 river, the Kalamazoo River, Portage River and the River  
10 Raisin which runs through Norvell Township. In fact,  
11 in Norvell Township we have River Raisin running  
12 through two parts of the township, one in the northern  
13 portion, one through the Village of Norvell, and the  
14 other outlet is through Mud Lake.

15 Norvell Township has many, many lakes in it,  
16 has many tributaries, has many wetlands. We have  
17 Vinyard Lake we have Wamplers Lake, we have Mud Lake,  
18 Swezzey Lake, Norvell Lake. There's several lakes,  
19 several unnamed lakes in our communities.

20 We have taken a lot of time and a lot of  
21 pride on our zoning ordinance and looking at  
22 environmental impacts that could happen to our lakes,  
23 and we've implemented a lot of things that would  
24 prevent people such as not oil people, we do cover  
25 that, unfortunately, I don't know if we could have, but

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 24

1       there's a lot of protection in our zoning ordinances.

2               One of the things we have done in our  
3       township is the two major lakes that we have is  
4       Wamplers Lake and Vinyard Lake. People have taken --  
5       spent a lot of money, put sewers around the lake to  
6       protect the groundwater, to protect their drinking  
7       water, and now we're confronted with this particular  
8       type of injection well.

9               As I said before, we were never notified that  
10       this injection well is going in, so we started looking  
11       into it and Hal Fitch, kind of a repeat, but I think  
12       it's important it goes for the record Hal Fitch of the  
13       DEQ, we had the opportunity the tell people at Super 8  
14       Motel that they had already approved these two  
15       injection wells, one on Bettis Road and one within 1000  
16       feet of the River Raisin that was done some 13 months  
17       ago.

18              I guess what I would ask based on a lot of  
19       this testimony that's given here, I would request that  
20       the EPA change -- make a change in its draft permit,  
21       this particular permit, take in consideration all this  
22       testimony that's been given. This is an  
23       environmentally sensitive area in our township.

24              I think of Norvell Township as being one huge  
25       wetland in the Irish Hills area. There isn't hardly a

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 25

1 spot you can go where you're either up on a hill or if  
2 you're down low. For many people that's  
3 environmentally sensitive. So I request a change in  
4 the draft. Thank you.

5 MS. OSTERMEIER: Thank you. Again, next is  
6 Art Botte, and followed by Art will be Jack Curtis.

7 MR. BOTTE: Yes. My name is Art Botte,  
8 B-O-T-T-E. I just want to go on record as saying that  
9 I'm opposed to putting in injection wells in Norvell  
10 Township or Jackson County or Lenawee County. I  
11 totally believe they are environmentally unsafe. I'm  
12 sorry I can't believe the propaganda you've been  
13 telling us for the last two hours.

14 MS. OSTERMEIER: Dan Curtis. Followed by  
15 Dennis Conant. Mr. Curtis. We'll come back to him in  
16 case he stepped out. Dennis Collins, followed by  
17 Michael Horning.

18 MR. CONANT: Dennis Conant, last name  
19 C-O-N-A-N-T, Norvell Township attorney. I'd asked a  
20 question earlier in the evening as to whether or not  
21 DEQ is aware of any failures in their injection wells  
22 that happened apart from failure of the casing. That  
23 answer was not -- that question was not answered. They  
24 said well make sure you make it part of this hearing,  
25 and so I'm making that a request of this hearing. You

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 26

1       advised whether or not there's been any failures not  
2       related to the casing.

3               My concern, of course, is that they talk  
4       about the level of containment. Every time you put a  
5       hole down you are, in fact, going through the levels,  
6       you are creating a pathway for migration of fluid that  
7       you're trying to put down there.

8               With oil wells and gas wells you have to  
9       drill where you find the resource, and Michigan creates  
10      a presumption that people are entitled to do that.  
11      We're not against oil and gas wells in Norvell  
12      Township. Injection wells, however, can be located  
13      anywhere because it's not a natural resource that you  
14      are collecting from the earth, it's something that's  
15      really a waste disposal site. So you can locate that  
16      waste disposal site anywhere.

17              West Bay has written us and they have told us  
18      that they were environmentally sensitive to the  
19      location of these injection wells. Well they're a  
20      thousand feet from the Rasin River. I suspect if it  
21      would have saved them some money, they probably would  
22      have had a platform out in the middle Norvell Lake and  
23      used that for an injection site. They're not  
24      environmentally sensitive. That's our concern is that  
25      if we get contamination, we get leakage, we get a

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 27

1 failure of the casing, we get upward migration through  
2 whatever means because when you put a hole through  
3 rock, it doesn't mean you're going to have a site seal.  
4 You might very well have fracturing that's going to  
5 allow migration right along the very pipe that's  
6 designed to put this stuff down there. How does that  
7 happen? It happens because of the pressure which  
8 causes the upward migration. It's got to go up a ways,  
9 no question about that, but when it gets into the  
10 aquifer, it's going to go, and then the approval of  
11 this permit could cause contamination of the Great  
12 Lakes. The river Raisin goes right to Lake Erie. Goes  
13 to a number of communities before it gets to Lake Erie  
14 and then.

15 MS. OSTERMEIER: I was just saying you're  
16 right at four minutes.

17 MR. CONANT: Okay. I'll try to finish up.  
18 It goes on Lake Ontario or goes towards the Detroit  
19 River and on to Lake Huron.

20 Right now they're authorized at 1200 barrels  
21 a day. That could change. That's the permit  
22 requirement right now of brine and whatever else is  
23 contained. They're saying that well, we're just  
24 putting back down in the earth what came out of it.  
25 Well they are, but they're concentrating it in one

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 28

1 spot. These are coming from a number of wells around  
2 the area. They say well they'll all be in this general  
3 area. I'm saying that I'm not convinced that we're  
4 being protected. We were not notified by the State of  
5 Michigan at the DEQ hearing. They don't tell you what  
6 the state requirements. They notified the county  
7 clerk. Well who thought to contact the county clerk to  
8 see if there was any request for permit? We will from  
9 now on, I can tell you that much.

10 So here we are, and now we've got the federal  
11 DEQ and they told us that well this is the draft  
12 permit, we're going to just go ahead and we have to  
13 hold a public hearing, but we're going to approve this.  
14 That's basically what I heard when I talked with Ms.  
15 Miller the other day.

16 So I'm concerned that this is going to go in  
17 without any safeguard to the community, and if, in  
18 fact, we have contamination, we'll be hundreds of years  
19 cleaning it up. I'll be dead and gone and West Bay  
20 will say, you know what, we followed all the permit  
21 requirements with the State of Michigan and the Federal  
22 DEQ. Thank you.

23 MS. OSTERMEIER: Thank you. Michael Horning  
24 followed by Fred Marsh.

25 MR. HORNING: My name is Michael Horning,

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 29

1 H-O-R-N-I-N-G. I'll repeat, I-N-G.

2 I came here basically tonight to try and find  
3 out some answers to questions that I had thinking the  
4 professionals were going to be here and, unfortunately,  
5 I really haven't heard, except for a depth chart, of  
6 very many explanations of an injection well. I seem to  
7 be getting most of my information from people that are  
8 just average citizens like the rest of us that looked  
9 into this even more than I have, and I have some real  
10 sympathy for these people, and some of the questions  
11 that they're bringing up.

12 I would like to go on record as saying that  
13 at this point coming into the meeting I was not one way  
14 or the other on injection wells. I just came for  
15 information. But after the meeting tonight, I would  
16 like to say that I am definitely against an injection  
17 well in Norvell Township. Thank you.

18 MS. OSTERMEIER: Next is Fred Marsh followed  
19 by George Sanfacon.

20 MR. MARSH: Fred Marsh, M-A-R-S-H.

21 EPA environmental potential accident, that's  
22 what I see. I'd like to thank all my neighbors and  
23 friends for coming down here and expressing their views  
24 on what's going on in our community, and it's a damn  
25 shame it's happening and you're allowing it to happen.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 30

1 I know you said they passed all this stuff, they met  
2 all requirements, but you don't live there; we do.  
3 Thank you.

4 MS. OSTERMEIER: Mr. Sanfacon and followed by  
5 Lalitha Doak.

6 MS. DOAK: No comment.

7 MR. SANFACON: My name a George Sanfacon,  
8 spelled S-A-N-F-A-C-O-N. I live on Mud Lake in Norvell  
9 Township just outside if Brooklyn. I'm hereby  
10 petitioning EPA to deny permits for these two wells.  
11 I'm doing this based on what we know. What do we know?  
12 We know two things. We know the Irish Hills comprises  
13 an extraordinary fresh water ecosystem, unsurpassed in  
14 its beauty. It's important to the local economy and  
15 its pivotal role in the bio region. It encompasses  
16 scores of lakes as well as headwaters of several major  
17 Michigan rivers.

18 Two, we know that the injection of massive  
19 amounts of liquid waste into deep wells causes seismic  
20 activities and earthquakes. While industry sources  
21 claim otherwise, both the U.S. Army, and the U.S.  
22 Geological Survey have concluded such.

23 Now based on the question and answer session  
24 earlier, I know that your best guess is that it won't  
25 be a problem, but I also know, as well as you do, that



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 31

1       you cannot be 100% certain of that.

2               The possibility of seismic activity in the  
3       proposed wells resulting in contamination of these  
4       extraordinary fresh water resources cannot be ignored.  
5       Surely this is not the place to apply any injection  
6       technologies that are risk of contamination.

7               Based on the question and answer session  
8       earlier, I also know that your criteria does not  
9       include such factors. But this is a world class  
10      heritage caliber site, and I believe that each of us  
11      here, as well as the EPA, is duty-bound protected and  
12      safeguarded on behalf of all people for all time.

13              Lastly, I assume that each of you took  
14      employment with the EPA because you wanted to make a  
15      real difference on the environment. You can do that by  
16      denying these permits. Thank you.

17              MS. OSTERMEIER: Next is Dorothy Ann Coyne,  
18      Dorothy Ann will be followed by Jennifer Porter.

19              MS. COYNE: My name is Dorothy Ann Coyne,  
20      D-O-R-O-T-H-Y, A-N-N, C-O-Y-N-E. And I also am a  
21      resident of a lake here in the Irish Hills. I have  
22      been for 30 years. And I echo George's comment about  
23      the beauty of the water land that we have here. We  
24      have oil wells. It seems that is a fact of life, and  
25      that is hard already for us, with the trucking, with

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 32

1 the air pollution, with just the general phenomena of  
2 so many oil wells in such a beautiful area. And it  
3 would seem to me that the injection wells could be  
4 taken on by other area. Now that would mean that the  
5 brine would be trucked, and that is a fact of that kind  
6 of thing if the injection wells got away from the oil  
7 wells. But if a truck falls over and spills, we can  
8 see what has happened, and we can get on the surface  
9 and do the best we can to clean up. But if a steel  
10 casing well is down hundreds of feet below us, and over  
11 the decades begins to corrode or for some reason things  
12 begin to migrate up through the layer of the shale or  
13 whatever we have below us, we can't see it, we don't  
14 know what's happening, and it seems to me in the best  
15 tradition of ancient Americans, we must look out for  
16 several generations to come.

17 My great hope is that these beautiful lakes,  
18 58 lakes inside of seven miles, will still be the  
19 beautiful place for long past or great grandchildren.  
20 Fresh water on this planet is such a tremendous  
21 treasure, and I thank the Environmental Protection  
22 Agency for holding that protection for us. Thank you.

23 MS. OSTERMEIER: Jennifer Porter. Jennifer  
24 will be followed by Mark Muhich.

25 MS. PORTER: My name is Jennifer Porter,

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 33

1 P-O-R-T-E-R.

2 First thing I'd like to request is that when  
3 announcements are made, they be made in the local  
4 paper, not the Jackson Cit-Pat so that people who  
5 actually live in the town are local paper we get it.  
6 It's always like somebody is trying to hide things from  
7 us.

8 The second comment I would like to make is  
9 I'm sorry, I don't remember your name, but during when  
10 you were saying your hands were tied, you made the  
11 comment that you need to see it from our side. Well  
12 forgive me for being so wrong, but dammit, you need to  
13 see it from our side. We live here.

14 I can show you where my great-grandmother  
15 lived. I can show you where my grandparents lived and  
16 where my parents got married and lived on Vineyard Lake.  
17 And now I live, and my kids live within a half a mile.  
18 To tell you the truth, I'm not going to live there much  
19 longer.

20 You said that there's no problem, there's no  
21 possibility of it coming back up, but yet, you actually  
22 made the comment when somebody asked about putting in a  
23 well to test it that, you know, old wells, old wells  
24 that haven't been closed off right there have been  
25 possibilities and chances where they've gone and tested

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 34

1 to see how far out the brine has gone. So it does come  
2 back up. So it can go out, and one day our 42 wells  
3 are going to turn into 80 wells, are going to be old  
4 wells. It may not be in my lifetime or my kids', but  
5 it could be in their kids'.

6 And liquid follows the path of least  
7 resistance. It will eventually in some shape, way or  
8 form, there's a very good possibility it will come back  
9 up.

10 I'm proposing, because I really don't think  
11 we have any say in this, I think this is a done deal,  
12 but I'm proposing that you take water samples of  
13 everybody within a couple mile radius of these  
14 injection wells so that there is a baseline so that one  
15 day when we start having health problems and we start  
16 having problems, you can test it and say you know what,  
17 your sample is different than it was on such and such a  
18 date before.

19 I'm also proposing that there be tracers or  
20 something like that put down so you know exactly that  
21 it came from there, and West Bay can't say, well you  
22 can't be sure, you can't be 100% sure, because they may  
23 have followed what your requirements are, but they have  
24 lied to people in the past and there is documentation  
25 of that.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 35

1           The other thing that I'd like to see is air  
2           quality samples be taken around these wells, and I  
3           don't want it monitored just by West Bay. I'm sure we  
4           would have enough volunteers in the community to rotate  
5           on a regular basis so that we can monitor our own air  
6           samples, and I don't think that's too much to ask.

7           MS. OSTERMEIER: Mark followed by Tamara  
8           Russell.

9           MR. MUHICH: My name is Mark Muhich, M-A-R-K  
10          M-U-H-I-C-H.

11          I'm the chair of the Central Michigan Group  
12          of the Sierra Club which comprises seven counties from  
13          Clinton County all the way down here in Jackson County,  
14          Lenawee, County.

15          I think that the EPA should try to greater  
16          detail the permit. As the previous speaker said, we  
17          don't have a real baseline for water quality as it  
18          exists today. We don't have a baseline for the air  
19          quality. I think that we should do that before you  
20          consider issuing this permit.

21          I don't think that you can appreciate how  
22          valuable our well resources are. Just a couple of  
23          hours before coming to this meeting we started filling  
24          our pool from a well that's been in our family for 60  
25          years, and it's a big two and a half inch hose, pumps

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 36

1 out hundreds of thousands of gallons a minute. It's  
2 cold, it's clear, it's clean, it's sweet. It must be  
3 some of the best water in the world, and to think that  
4 we're going to jeopardize it with a pro forma draft  
5 permit I think would be a terrible tragedy.

6 I'd like for you to think about some of the  
7 very rare species that live in this unique habitat, in  
8 particular the turtles. Turtles have been as we know  
9 existing on earth pretty much the same shape as they  
10 have for over 200 million years, and yet, they are in  
11 deep decline, especially some of the turtles that live  
12 right around this vicinity. I'm talking about land  
13 turtles and I'm talking about spotted turtles. Their  
14 habitat is very clear water with very muddy bottoms,  
15 and they need a lot of land to exist. They are in deep  
16 decline because their habitat has been fragmented. And  
17 before you issue this permit, I'd like you to consider  
18 the increased fragmentation of their habitat when these  
19 pipelines come for the 40 wells or the 80 wells that  
20 are going be pretty much dissecting critical habitat  
21 for these turtles.

22 It's not an exaggeration to say that oil  
23 companies have accomplished significant exceptions from  
24 every other type of environmental rule and regulation.  
25 Talking about you said you don't know what the

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 37

1 Halliburton Rule is, but it's a matter of them thinking  
2 that chemicals aren't proprietary and they don't have  
3 to disclose them to us.

4 The oil industry, the gas industry have  
5 excluded themselves from any type of local township or  
6 county regulations. Depends on part 615. And what  
7 other industry in the entire country can expect to work  
8 that type of exemption?

9 We're talking about water, the greatest  
10 resource in Michigan, and probably in the world. The  
11 oil industry has exerted an influence which from  
12 Michigan's water withdraw, so that means that  
13 potentially they can draw out a million gallons, five  
14 million gallons for each of these wells as the oil  
15 plays out.

16 So what I'm asking you to do is set a  
17 baseline for it, baseline environmental standard.  
18 Think about cumulative impact for all of the wells that  
19 two, three four injection wells. I know that this is a  
20 standard that can be applied to the federal law. And  
21 I'm looking at protecting one of the oldest and rarest  
22 turtles that live in one of the greatest habitats in  
23 the world so thank you very much.

24 MS. OSTERMEIER: Tamara Russell, followed by  
25 Brent Bartson.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 38

1 MS. RUSSELL: I'm Tamara Russell,  
2 T-A-M-A-R-A, R-U-S-S-E-L-L. Thank you.

3 And I am making a request to decline  
4 injection wells, and I make that request for all wells  
5 to be declined by you, please.

6 First of all, and the reason I'm asking you  
7 to decline them is that you are the Environmental  
8 Protection Agency. First you protect our environment.  
9 I know you work within laws and regulations, but what  
10 if, what if those laws are wrong? What if they don't  
11 protect enough. So I ask you to protect us.

12 On the first basis on human error, you know,  
13 there's human error everywhere with the wells, with the  
14 well sites, with the life of the well, the construction  
15 of the wells, as well as the traveling to and from the  
16 wells. I mean these all need to be considered that  
17 there is human error that can be involved with this.

18 The second that the earth changes in our  
19 beautiful community has already expressed the things  
20 that can happen there.

21 And last, but not least, your responsibility  
22 is to protect the environment, and as human beings, we  
23 need to protect life. That is life that you're  
24 risking. So please, decline the wells, all the wells.

25 Thank you.



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 39

1 MS. OSTERMEIER: Brent Bartson will be  
2 followed by John Bancroft.

3 MR. BARTSON: Brent Bartson, B-A-R-T-S-O-N.  
4 I'm a resident of Lodi Township and the  
5 Raisin River runs through our backyard. I'm here to  
6 oppose these injections wells for many reasons. The  
7 first reason is, you know, I came here expecting to  
8 hear some professional comments and questions being  
9 answered by the EPA. I thought the EPA was here to  
10 answer those questions in a very scientific way. From  
11 this community, I don't think this community feels you  
12 did a very good job of answering those questions. In  
13 fact, I think you offended a lot of people. So if EPA  
14 is here to protect us from this type of industrial  
15 activity, I don't feel very confident that you're doing  
16 that very well.

17 I've also participated in a lot of the  
18 meetings with the DEQ Office of Oil and Gas Management,  
19 and I don't feel very confident that from their answers  
20 that they're going to protect the environment from, you  
21 know, possible mishaps that might occur from these  
22 injections wells.

23 So my strong opinion is that you oppose these  
24 permits, please. Thank you.

25 MS. OSTERMEIER: John Bancroft followed by

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 40

1 Brook Fobes.

2 MR. BANCROFT: John Bancroft,  
3 B-A-N-C-R-O-F-T.

4 I have a lot of things that I was going to  
5 say but four minutes. I don't know if you've taken a  
6 tour of the area to really look closely at it, get your  
7 feet in the ground. The site that they have showing  
8 the wells isn't very good. It's got little dots on  
9 that. I've taken the time to use this piece of art and  
10 you can't see it, I'll just put it in there. All those  
11 little red dots are two years, and the black dots are  
12 the injection wells where they proposed. The round  
13 circles are the industrial sites that they call central  
14 processing facilities. You look at that, if you get a  
15 chance, okay? It's to scale. That's about a mile.

16 This area right here on that map running from  
17 Wamplers Lake up to Wolf Lake Road is a unique nature  
18 area, world unique. It's called a prairie fen, F-E-N,  
19 and we have some of the most rare prairie fen on the  
20 planet. It goes from maybe up by Pontiac, Michigan  
21 right down through here, little south of here. All you  
22 have to do is go out and see all that Adam described  
23 and that's where it is. It's unique. It's sitting on  
24 top of about 200 feet of glacial till, gravel. From  
25 that source, and I disagree on it a little bit, because

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 41

1 going off in that direction from this area is the  
2 Tiffin River which connects to the Maumee River. The  
3 St. Joseph River goes down to Elkhart, Indiana and then  
4 out to Lake Michigan. Then you have the Kalamazoo  
5 River running over to Saugatuck. You have the Grand  
6 River going through Lansing and Grand Rapids. You have  
7 actually Huron River on the north end of this area,  
8 this being infested with oil wells as we speak.

9 Then we have this whole area covered by the  
10 Raisin River. If you contact Sybil Kolon, she works  
11 for DEQ, she has the information describing the  
12 recharge of the whole watershed aquifer. And right  
13 where these sites are that we're talking about, and the  
14 wells, the pixels are dark red. It's the heaviest  
15 recharge for all these rivers. We are the top of the  
16 hill, and this is a huge recharge.

17 Virtually everybody that lives, and there's  
18 72 towns and cities on these rivers, everybody except  
19 maybe over by Detroit, depends on well water,  
20 everybody. Very few get much surface water, it's all  
21 wells. Personal people, cities, it's all clean, sweet,  
22 pure well water, okay? To allow injection wells, and  
23 there are already some in the edges of this, to come in  
24 here is jeopardizing the future. I'm almost done.

25 Every single penny of economy is taking place

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 42

1 in this area for the last 200 years has relied on that  
2 water. We're going to have a few years where they're  
3 going to take a few billion dollars worth of oil and  
4 gas out here. Then we have to go for the rest of  
5 eternity depending on this water, the biggest sources  
6 of freshwater in the world. Everybody else in the  
7 world is in trouble with water. Michigan has it, and  
8 these people, and I've got a real bone to pick with the  
9 DEQ, the Department of Environmental Quality, to allow  
10 this kind of infestation filth to come in here on this  
11 kind of land should be illegal, and we will pursue this  
12 with you, and the oil companies. We will not get off  
13 you ever. We're going to increase it, and we're going  
14 to put pressure on you because you've got to do your  
15 job and you'd better start doing it. Thank you.

16 MS. OSTERMEIER: Brooke Fobes, followed by  
17 Anita Fobes.

18 MS. FOBES: Okay. My name is Brooke Fobes,  
19 Last name is F-O-B-E-S, and I'm a registered nurse here  
20 practicing in Michigan. I've also had experience in  
21 research and environmental health, and I have  
22 significant concerns about this well that's being  
23 proposed. I don't know what the stage is that it's in  
24 right now, but I really ask that you not approve this  
25 well. I don't live in the area, but several of my very

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 43

1       dearest friends do live in this area, very near to this  
2       proposed well, and I have significant concerns about  
3       their land and my friends that farm in the area. I  
4       worry about that too.

5               I guess this is our point where we say what  
6       we would like our response from the EPA that we say it  
7       and respond in writing. So I have a couple questions  
8       just for the record. I would like to know what is  
9       brine exactly? I think it's a very misleading term  
10      because in common use, this means saltwater, but I  
11      think you might mean it more of a chemical sense. I  
12      think that's something we all really need to know  
13      what's in there.

14             Why are there not environmental impact  
15      studies required? They should be required for any and  
16      all wells of any type, including injection wells.  
17      There should be an environmental impact study for this  
18      well and all wells.

19             I would like to know also who's responsible  
20      for notifying the community. That's been a problem as  
21      people in this community were not notified in the  
22      publication available to them here locally. So we  
23      actually were able to network and talk to each other  
24      and find out, fortunately, to be here tonight,  
25      otherwise we would have never known. That's a very

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 44

1 important part to involve the community where you're  
2 approving a well from.

3 I also note from my environmental health  
4 studies I did when I was a student nurse that there is  
5 not, at least there wasn't at this time, any required  
6 for testing rural well water for safety. Certainly not  
7 any general standards for testing rural wells on any  
8 regular basis, and I don't think it's even a funded  
9 activity. So I think that that's something that needs  
10 to be done around any proposed well that goes in.

11 I'd also like to know if the EPA can't stop a  
12 well like this when the community doesn't want it, then  
13 who can? I would like to see the response in writing.  
14 I think that's all I have.

15 I just would like to add that water is the  
16 most important resource we have and we are very proud  
17 of it here. We know in Michigan this is something  
18 that's very special about where we live, and we care  
19 about it, and we're stubborn, and I'm sure we'll be  
20 watching this issue in the future. Water is priceless,  
21 and it's necessary for life, so really this is a right  
22 that we have safe water and there's really no way to  
23 put the Genie back in the bottle once we have these  
24 chemicals down in the ground. Despite all precautions,  
25 the water will -- the flows underground will change

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 45

1 over time, and there's no way to anticipate where these  
2 chemicals will go years down the road. So thank you  
3 very much for being here, and I please ask that you  
4 decline this well permit.

5 MS. OSTERMEIER: Anita Fobes, followed by  
6 Kurt Gleichman.

7 MS. FOBES: My name is Anita Fobes, A-N-I-T-A  
8 F-O-B-E-S. I understand that your job as EPA official  
9 is to grant permits based on technical, scientific and  
10 legal requirements. And the sentiment of those of us  
11 here are the values of this community don't really play  
12 into a decision that you're making. However, the  
13 permit that we're discussing tonight describes  
14 injection of brine, as you said, 2950 feet below ground  
15 level. I'm more concerned about the surface  
16 contamination and consequences of -- environmental  
17 consequences of this injection well.

18 A significant number of contamination events  
19 result from human error, not in engineering or  
20 technical mistakes. For this reason, because the area  
21 is so sensitive environmentally, I would request that  
22 you deny or deny the permit and conduct a complete  
23 environmental study of the impacts of a surface event.

24 At the Super 8 meeting that we all call the  
25 Super 8 meeting that happened earlier this year, one of

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 46

1 the West Bay officials said that pipelines will be  
2 constructed to deliver brine waste to the injection  
3 wells, and with, with pipeline situation we haven't  
4 discussed this at all, I don't know if it's actually  
5 part of the EPA permit, but there's an inevitability  
6 that the pipelines will eventually fail, they just do.  
7 And a failure of a pipeline over wetlands and this  
8 environmentally sensitive area would be a catastrophe,  
9 not just an event, but it would be a catastrophe to a  
10 larger area and Great Lakes.

11 So I believe that the terms of this permit  
12 are not consistent with EPA guidelines for the  
13 injection program and I believe an extensive  
14 environmental study needs to be completed before the  
15 permit goes any further. Thank you.

16 MS. OSTERMEIER: And then did Jack Curtis  
17 return? Did Jack Curtis return. Okay. Then Kurt  
18 Gleichman followed by Kathryn Ulbin.

19 MR. GLEICHMAN: Kurt Gleichman. K-U-R-T,  
20 G-L-E-I-C-H-M-A-N.

21 How does the industry, EPA, DEQ protect  
22 citizens from the cost of water testing? How frequent  
23 should they test. How do citizens know when their  
24 water is contaminated by the injection well? Who has  
25 the burden of proof? Who will pay for the cost of



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 47

1 cleanup, medical treatment, provision of fresh water to  
2 the citizens? Who is ensuring the protection of the  
3 citizens well water after the injection well is capped?

4 These injection wells violate our  
5 constitutional right and should not be built. Michigan  
6 Constitution Article 1, Section 1 says, "All political  
7 power is inherent in the people. Government is  
8 instituted for their equal benefits, security, and  
9 protection." It does not say all political power is  
10 inherent in the industry. Government is instituted for  
11 their equal benefits, security, and protection.

12 Who is requesting these wells? Industry.  
13 Who does not want these wells? The people. Injecting  
14 toxic waste under our aquifers only benefits industry  
15 and leaves our communities with an insecure existence  
16 and unprotected future. Thank you.

17 MS. ULBIN: Kathryn Ulbin. U-L-B-I-N. I  
18 live in Norvell Township at Vineyard Lake. I have a  
19 few things to say. One, we, live in the River Raisin  
20 watershed basin. If that doesn't tell you where we  
21 live, there's nothing else. If you don't know that,  
22 you should be looking at our township.

23 The pristine part of the River Raisin is  
24 where you've got an injection well. It's 1000 feet  
25 from the River Raisin. That is the pristine part of

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 48

1 the River Raisin.

2 I wonder what happened to transparency. Why  
3 wasn't the township notified? Why weren't the people  
4 of Norvell Township notified? I think that is  
5 terrible. Are you doing away with local government?  
6 There was a spill in 1987 at Gilbert Science, and that  
7 was in Ann Arbor. It was approved by the DNR, and it  
8 was an injection well, and it didn't work. It's  
9 contaminated still today, and they can't even sell the  
10 building around the contamination. So it never goes  
11 away once it's contaminated.

12 I wish that you would move these injection  
13 wells away from the pristine parts of our township.  
14 The West Bay said they did an environmental impact  
15 study. Where is it? Does anyone know where it is? We  
16 don't. We've never seen it. We would like to see it.

17 Most of the errors are -- 80% of the errors  
18 with the injection wells are from human errors, and the  
19 others are construction malfunctions. The people who  
20 pay for these environmental contaminations are private,  
21 and also the people in the community pay. Thank you.

22 MS. OSTERMEIER: I believe we've -- I've  
23 called everyone who indicated on these papers that were  
24 interested. Did I miss you? Okay. Please, if you'd  
25 like to make public comment. I apologize if I missed

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 49

1       somebody, it wasn't intentional.

2               MR. COYNE: My name is Bernie Coyne,  
3       C-O-Y-N-E, and I've lived here for 30 years. And we  
4       live in one of the epicenters of fresh water in the  
5       world. And we look at the news, you see all these  
6       people that are dying for fresh water, and for us to  
7       contaminate this makes no sense at all.

8               And the decision making process, I'm sure  
9       you've followed every regulation, but it was, my wife  
10      referred to it earlier, the native American people  
11      think about seven generations into the future when they  
12      make a big decision. I think this decision has been  
13      made basically following the regulations, but informed  
14      by the oil company and not by research.

15              And I can understand innocently in Chicago,  
16      you think that's valid. However, the truth is, and you  
17      heard it from all these wonderful, clear descriptions  
18      of feeling and scientific fact that it's inadequate  
19      what we have received in information, and we wonder if  
20      you're getting the right information because the source  
21      is the oil company. I mean it's like saying now Mr.  
22      Fox, would you watch the chicken coop.

23              And an environmental study would indicate how  
24      very special this water wonderland is. And also then  
25      there is the fen, and then there are all the special

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 50

1 species. And on the basis of a thorough engagement  
2 with Environmental Protection Acts, we ought to be able  
3 to say no very definitely, not because we live here,  
4 because we love the water and it's so rare. Please  
5 take that under consideration. Thank you.

6 MS. OSTERMEIER: Okay. I'm going to take  
7 this gentleman who just stood up, then Sharon Donovan,  
8 and followed by Sharon will be you.

9 MR. GAJAR: Good evening. My name is John  
10 G-A-J-A-R, and I submitted a written statement as to  
11 why I think there should not be an injection well and  
12 it goes over everything we've already said here about  
13 the seismic activity, which I believe the gentleman  
14 said we have a very soft basin, not an impervious basin  
15 as was suggested. But I think, I think the EPA is  
16 trying to do their job, but a great man in my time once  
17 said, the buck stops here.

18 Ladies and gentlemen of the EPA, you have an  
19 opportunity to preserve what we have here. I ask you  
20 to ask your conscious, because if I was sitting up  
21 there, I'd ask myself, what would I do, and I would do  
22 what my conscious tells me is the right thing to do,  
23 and that is listen to the people, we the people. Thank  
24 you.

25 MS. DONOVAN: Sharon Donovan, D-O-N-O-V-A-N.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 51

1 The stuff I've heard from other people is really  
2 compelling and emotional basis, but what I was  
3 wondering is what is the EPA required to do, whether  
4 you actually have the ability to stop this from  
5 happening, from the injection wells being in such a  
6 beautiful place and what power does this community  
7 have, and what processes can we follow to have actual  
8 choices over the powers to make this not happen.

9 I'm also curious that these rivers in this  
10 area drain into the Great Lakes, that means they also  
11 impact Canadian water rights. And I also wanted to  
12 know about the -- in the structure of the EPA it seems  
13 to me that some of its effectiveness is hampered by  
14 politics and funding, and the political cycle. We're  
15 in a place where nothing gets done right now, maybe  
16 nothing will get done for the rest of the year.

17 But the other thing that budget affects its  
18 enforcement and oversight, and what I don't know  
19 anything about is whether you guys actually have the  
20 ability to staff, the funding or any of the kinds of  
21 things the enable the EPA to protect these communities,  
22 and I feel very sorry for you having to sit there being  
23 targets. Thank you.

24 MS. GLEICHMAN: Hello, my name is Hillary  
25 Gleichman, G-L-E-I-C-H-M-A-N, and I'm from Washtenaw

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 52

1 County. Although I'm not from this county, I am part  
2 of the community. I am your neighbor. I am your  
3 friend. I care what happens here. I don't know that  
4 I'm a friend and neighbor of the EPA or DEQ. I don't  
5 understand -- I'll back up.

6 Some of you have delivered passionate  
7 speeches; some of you have delivered factual  
8 statements. As I step back, I can't even believe that  
9 we're talking about allowing our government people from  
10 other areas to come in and rape this land, take our  
11 water, spoil the aquifers, spoil our water and then  
12 leave, and leave us with the mess to be cleaned up not  
13 by ourselves but by future generations from here to  
14 eternity, as John said. That we're even discussing  
15 this just disgusts me beyond belief, and I, of course,  
16 hope this is turned down. I understand that you have a  
17 job to do, but this is, this is a life's water, our  
18 life, not just in Michigan but as human beings. Why  
19 are we going to such extreme measures to try to extract  
20 a finite resource? We can be putting energy literally  
21 and figuratively into renewable energies as opposed to  
22 going to such extreme measures, and then leaving the  
23 waste. And I do feel like it's just a rape of the  
24 earth. Thank you.

25 MS. OSTERMEIER: Yes, please come on up.

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 53

1 MR. WOTTON: Good evening. My name is Clive  
2 Wotton, W-O-T-T-O-N, resident of Saline and a frequent  
3 camper an enjoyer of this area, and I'm shocked at  
4 what's happened around here with the number of oil  
5 wells that's gone in. To my mind it's actually it's  
6 very damaging to the area. It obviously relies on  
7 tourism quite heavily.

8 So yesterday my wife gave me some papers to  
9 read and they're actually coal papers involving West  
10 Bay from 1998, where West Bay intentionally perforated  
11 tanks to allow drainage to occur in the ground causing  
12 contamination which DEQ were involved in actually  
13 forcing remediation. I'm shocked that you're allowing  
14 West Bay to do a survey, to then actually do the  
15 monitoring and actually put in a site wells or testing  
16 wells, a company that has intentionally polluted  
17 previously. Thank you.

18 MS. OSTERMEIER: Is there anybody else who  
19 was not given an opportunity to make a public comment  
20 for the record that would still like to do that. Also  
21 remember, if you're interested in submitting something  
22 in writing, you can do that as well. With that, Dana?

23 MS. RZEZNIK: I just have to ask those  
24 questions officially for the record. Is there anyone  
25 who has requested to speak but whose name was not

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 54

1 called? Is there anyone who would like to enter  
2 comments into the formal record?

3 Let the record show that no one indicates  
4 they wish to enter comments. Thank you.

5 Again, if you have written comments, but did  
6 not wish to speak, please give them to one of us before  
7 you leave here tonight, or forward them in writing to  
8 the EPA prior to the deadline of June 1st, 2012.

9 This concludes the hearing. Thank you.  
10 (The proceeding was concluded at 8:42 p.m.)

11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 55

C E R T I F I C A T E

STATE OF MICHIGAN:

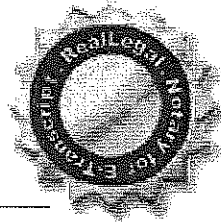
I, Mindy Womack, a Michigan Certified Court Reporter,  
do hereby certify:

That the foregoing proceedings were taken  
down, as stated in the caption, and reduced to  
typewriting under my direction, and that  
the foregoing pages represent a true  
record of said proceedings.

IN WITNESS WHEREOF, I have hereunto set my  
hand this 1st day of June, 2011.

*Jane Rose Reporting.*

Mindy Womack



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 56

<p><b>A</b></p> <p>abandon 10:12 ability 51:4,20 able 43:23 50:2 abnormalities 16:2 accept 13:5 14:24 accident 29:21 accomplished 36:23 accurate 5:3 acre 18:10 Act 3:22 7:8,16 action 4:21 actions 16:15 activities 30:20 activity 31:2 39:15 44:9 50:13 Acts 50:2 actual 51:7 acute 16:1 Adam 21:22 23:3,5 40:22 add 44:15 added 5:7 address 6:12 12:22 addressed 5:6 adds 20:6 adequate 10:11 19:5 Administrative 5:8 6:2 admits 15:15 adverse 17:12 advised 26:1 Affairs 2:10 3:12 Agency 3:4 6:22 32:22 38:8 ago 12:20 14:13 24:17 ahead 28:12 air 32:1 35:1,5,18 ALDEN 23:5 alerting 13:1 alleging 17:22 allow 9:5 27:5 41:22 42:9 53:11 allowed 21:18 allowing 29:25 52:9 53:13 allows 12:1,4 altered 13:12 American 49:10 Americans 32:15 amount 10:13 amounts 15:16 30:19 analysis 10:5 ancient 32:15 Anderson 15:1 20:17 20:19 anemia 15:25 16:22</p>	<p>Anhydrite 19:22,25 20:1,3,9 Anita 42:17 45:5,7 Ann 31:17,18,19 48:7 Anna 2:6 3:6 4:12 6:19 6:20 18:6 announcement 4:14 announcements 33:3 annual 10:5 annulus 9:23 10:4 answer 25:23 30:23 31:7 39:10 answered 25:23 39:9 answering 39:12 answers 12:10 13:19 14:23 29:3 39:19 anticipate 45:1 anybody 53:18 apart 25:22 aplastic 15:25 apologize 48:25 appalled 20:21,21 appeal 5:11 APPEARANCES 2:1 appeared 12:19 appendix 15:11 appetite 16:16 applicant 14:4 application 15:4 19:20 applied 37:20 apply 31:5 appreciate 35:21 approval 27:10 approve 14:24 28:13 42:24 approved 22:5 24:14 48:7 approving 44:2 approximately 8:17 11:6 12:17 April 4:16 aquifer 7:17 17:16 27:10 41:12 aquifers 47:14 52:11 Arbor 48:7 area 8:5 14:8 18:21 19:8,15 22:4,9 24:23 24:25 28:2,3 32:2,4 40:6,16,18 41:1,7,9 42:1,25 43:1,3 45:20 46:8,10 51:10 53:3,6 areas 52:10 Army 30:21 aromatic 15:18 17:7 art 23:4 25:6,6,7 40:9 Article 47:6</p>	<p>asked 20:24 25:19 33:22 asking 17:25 37:16 38:6 assessment 12:5,6 associated 16:10 17:9 assume 31:13 assure 21:20 asthma 17:10 atrophy 16:12 attorney 25:19 attributed 11:11 author 3:7 authorize 14:15 authorized 27:20 authorizes 9:15 available 6:4,6 43:22 Avenue 2:15 average 29:8 aware 4:20 13:8 22:24 25:21 A-N-D-E-R-S-O-N 20:20 A-N-I-T-A 45:7 A-N-N 31:20</p> <p><b>B</b></p> <p>back 25:15 27:24 33:21 34:2,8 44:23 52:5,8 backyard 39:5 Bacon 21:11,22,24,24 Bancroft 39:2,25 40:2 40:2 barrels 27:20 barrier 19:23 Bartson 37:25 39:1,3 39:3 base 8:8 based 14:3 24:18 30:11,23 31:7 45:9 baseline 34:14 35:17 35:18 37:17,17 basement 18:24 basically 20:5 28:14 29:2 49:13 basin 47:20 50:14,14 basis 9:25 10:1,4,6 35:5 38:12 44:8 50:1 51:2 bat 19:15 Bay 1:8 3:14 5:10 6:25 7:3,23 8:2 9:13,16 9:21 10:2,10,18 15:4 15:12 20:24 26:17 28:19 34:21 35:3</p>	<p>46:1 48:14 53:10,10 53:14 Bay's 19:20 beautiful 32:2,17,19 38:19 51:6 beauty 30:14 31:23 begins 32:11 behalf 31:12 beings 38:22 52:18 belief 52:15 believe 25:11,12 31:10 46:11,13 48:22 50:13 52:8 benefits 47:8,11,14 benign 17:14 benzene 15:17,25 Benzine 15:22 Bernie 49:2 best 30:24 32:9,14 36:3 better 42:15 Bettis 22:9 24:15 beyond 52:15 bifida 16:3 big 35:25 49:12 biggest 42:5 billion 42:3 bio 30:15 birth 16:2 17:12,13 bit 4:18 40:25 black 40:11 blood 17:2,3 bond 10:12 18:7,8,9 bone 15:23 16:1,22 42:8 Bormuth 14:19,25 15:2 20:14 bother 20:22 Botte 13:23 14:12,12 23:4 25:6,7,7 bottle 44:23 bottom 9:2 bottoms 36:14 brain 16:12 breathing 16:6 Brent 37:25 39:1,3 brine 8:2 9:12 12:23 20:23 27:22 32:5 34:1 43:9 45:14 46:2 brines 15:15,16 bringing 29:11 Brook 40:1 Brooke 42:16,18 Brooklyn 1:14 30:9 brought 20:25 bubbling 18:3 20:11</p>	<p>buck 50:17 budget 51:17 building 48:10 built 47:5 burden 46:25 business 12:14 B-A-C-O-N 21:25 B-A-N-C-R-O-F-T 40:3 B-A-R-T-S-O-N 39:3 B-O-R-M-U-T-H 20:15 B-O-T-T-E 14:12 25:8</p> <p><b>C</b></p> <p>C 3:21 55:1,1 caliber 31:10 California's 17:4 call 10:23 40:13 45:24 called 8:1 40:18 48:23 54:1 calling 6:15 camper 53:3 Canadian 51:11 cancer 16:1 17:6 cap 20:10 capped 47:3 caption 55:9 carcinogen 15:23 carcinogenic 17:1,8 care 44:18 52:3 case 25:16 casing 9:2,3,19 25:22 26:2 27:1 32:10 Cassell 2:10 3:11 cataracts 17:3 catastrophe 46:8,9 cause 9:9 15:23 16:5 16:14,20,21 17:2,5 19:5 27:11 caused 17:16 18:22 19:7 causes 16:19 27:8 30:19 causing 53:11 cells 17:2 cemented 8:25 Center 17:10 central 16:21 35:11 40:13 cerebellar 16:13 certain 31:1 Certainly 44:6 Certified 55:5 certify 55:6 chair 35:11 chance 40:15 chances 33:25</p>
---	--	--	--	--

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 57

<p><b>change</b> 22:7,12 24:20 24:20 25:3 27:21 44:25 <b>changes</b> 38:18 <b>charge</b> 13:6 <b>chart</b> 29:5 <b>checked</b> 6:16 <b>chemical</b> 20:22 43:11 <b>chemicals</b> 17:14 20:12 37:2 44:24 45:2 <b>Chicago</b> 6:1,23 49:15 <b>chicken</b> 49:22 <b>Chico</b> 17:24 <b>childhood</b> 17:10 <b>children</b> 20:13 <b>Children's</b> 17:10 <b>choices</b> 51:8 <b>choose</b> 5:19 <b>chronic</b> 16:7,21 <b>Church</b> 21:25 <b>circles</b> 40:13 <b>cities</b> 41:18,21 <b>citizens</b> 29:8 46:22,23 47:2,3 <b>Citizen-Patriot</b> 4:16 <b>Cit-Pat</b> 33:4 <b>claim</b> 30:21 <b>class</b> 1:6 3:14 4:12 7:22 18:2 19:7 21:14 31:9 <b>classified</b> 16:25 <b>clean</b> 32:9 36:2 41:21 <b>cleaned</b> 52:12 <b>cleaning</b> 28:19 <b>cleanup</b> 47:1 <b>clear</b> 36:2,14 49:17 <b>cleared</b> 13:10 <b>clerical</b> 15:8 <b>clerk</b> 28:7,7 <b>clinical</b> 15:24 <b>Clinton</b> 35:13 <b>Clive</b> 53:1 <b>close</b> 10:11 14:6,16 <b>closed</b> 18:20 33:24 <b>closely</b> 40:6 <b>Club</b> 35:12 <b>coal</b> 53:9 <b>Code</b> 3:19,24 <b>cognitive</b> 16:13 <b>cold</b> 36:2 <b>collecting</b> 26:14 <b>Collins</b> 25:16 <b>color</b> 16:16 <b>come</b> 3:1 10:25 11:8 11:13,14 12:2,9 17:21 20:11 21:19</p>	<p>25:15 32:16 34:1,8 36:19 41:23 42:10 52:10,25 <b>comes</b> 13:17 <b>coming</b> 21:7 22:18 28:1 29:13,23 33:21 35:23 <b>comment</b> 1:5 4:8 5:14 6:9 10:21 11:11,24 14:1 15:13 30:6 31:22 33:8,11,22 48:25 53:19 <b>commenters</b> 11:4 <b>comments</b> 3:13 4:10 4:17 5:3,5,6,9,13,24 6:3 7:1 10:15,16 11:2,5,9,20 15:3 20:15,20 39:8 54:2,4 54:5 <b>Commission</b> 17:18,25 <b>common</b> 15:15 43:10 <b>commonly</b> 8:1 <b>communication</b> 19:2 <b>communities</b> 23:19 27:13 47:15 51:21 <b>community</b> 22:24,25 28:17 29:24 35:4 38:19 39:11,11 43:20,21 44:1,12 45:11 48:21 51:6 52:2 <b>companies</b> 36:23 42:12 <b>company</b> 1:8 3:14 5:11 7:4 9:13,16,16 9:21 10:2,10,18 18:8 49:14,21 53:16 <b>Company's</b> 8:3 <b>compelling</b> 51:2 <b>compensated</b> 19:12 <b>complaints</b> 17:20,21 <b>complete</b> 19:10 45:22 <b>completed</b> 46:14 <b>completely</b> 18:9 <b>composition</b> 20:23 <b>comprises</b> 30:12 35:12 <b>Conant</b> 25:15,18,18 27:17 <b>concentrating</b> 27:25 <b>concentrations</b> 16:18 <b>concern</b> 12:15 26:3,24 <b>concerned</b> 13:20 28:16 45:15 <b>concerns</b> 42:22 43:2 <b>concluded</b> 19:6 30:22</p>	<p>54:10 <b>concludes</b> 18:23 54:9 <b>conclusion</b> 6:11 <b>conclusively</b> 15:22 <b>conduct</b> 9:17 45:22 <b>conducted</b> 19:13 <b>confident</b> 39:15,19 <b>confining</b> 8:17,19 19:20 <b>confronted</b> 24:7 <b>confusion</b> 16:14 17:2 <b>connects</b> 41:2 <b>conscious</b> 50:20,22 <b>consequences</b> 45:16 45:17 <b>consider</b> 5:9 10:16 35:20 36:17 <b>consideration</b> 24:21 50:5 <b>considered</b> 14:9 38:16 <b>consistent</b> 5:1 46:12 <b>constituents</b> 15:15 <b>Constitution</b> 47:6 <b>constitutional</b> 47:5 <b>constructed</b> 8:22 46:2 <b>constructing</b> 9:14 <b>construction</b> 7:13 8:6 8:7 38:14 48:19 <b>contact</b> 28:7 41:10 <b>contain</b> 15:16 <b>contained</b> 27:23 <b>containing</b> 9:5 <b>containment</b> 26:4 <b>contains</b> 7:17 <b>contaminants</b> 14:14 <b>contaminate</b> 49:7 <b>contaminated</b> 12:23 46:24 48:9,11 <b>contaminates</b> 14:7 <b>contamination</b> 12:17 13:2,15 17:17,22 18:13,14 26:25 27:11 28:18 31:3,6 45:16,18 48:10 53:12 <b>contaminations</b> 48:20 <b>control</b> 3:8,18,23 4:2 5:1 7:5,6,12 10:18 <b>convinced</b> 28:3 <b>coop</b> 49:22 <b>Copies</b> 5:23 <b>copy</b> 1:24 5:20 6:3 <b>correctly</b> 5:18 <b>corrode</b> 32:11 <b>corrosion</b> 9:5 <b>cost</b> 46:22,25</p>	<p><b>counties</b> 17:21 35:12 <b>country</b> 37:7 <b>county</b> 1:3 3:15 11:19 18:12 23:8 25:10,10 28:6,7 35:13,13,14 37:6 52:1,1 <b>couple</b> 34:13 35:22 43:7 <b>course</b> 26:3 52:15 <b>court</b> 2:18 4:23 6:18 11:10 55:5 <b>cover</b> 23:24 <b>covered</b> 41:9 <b>Coyne</b> 31:17,19,19 49:2,2 <b>creates</b> 26:9 <b>creating</b> 26:6 <b>criteria</b> 31:8 <b>critical</b> 36:20 <b>cross-examination</b> 4:24 <b>crystalline</b> 18:24 <b>cumulative</b> 9:24 37:18 <b>curious</b> 51:9 <b>current</b> 7:19 <b>Curtis</b> 25:6,14,15 46:16,17 <b>cycle</b> 51:14 <b>C-O-N-A-N-T</b> 25:19 <b>C-O-Y-N-E</b> 31:20 49:3</p>	<p>49:8,12,12 <b>decisions</b> 4:9 <b>decline</b> 36:11,16 38:3 38:7,24 45:4 <b>declined</b> 38:5 <b>deep</b> 8:6 19:1 30:19 36:11,15 <b>deepest</b> 8:23 <b>defects</b> 16:3 <b>defined</b> 7:16 <b>definite</b> 14:23 <b>definitely</b> 22:5 29:16 50:3 <b>deliberately</b> 15:10 <b>deliver</b> 46:2 <b>delivered</b> 52:6,7 <b>delivery</b> 17:13 <b>demonstrated</b> 10:10 <b>denied</b> 12:7 15:10 <b>Dennis</b> 25:15,16,18 <b>dense</b> 19:22 <b>density</b> 19:12 <b>deny</b> 5:10 10:17 30:10 45:22,22 <b>denying</b> 31:16 <b>department</b> 11:25 18:20 42:9 <b>depending</b> 42:5 <b>depends</b> 37:6 41:19 <b>Deposit</b> 18:8 <b>depression</b> 16:22 <b>depth</b> 8:4 29:5 <b>depths</b> 19:21 <b>DEQ</b> 11:22,25 22:1 24:13 25:21 28:5,11 28:22 39:18 41:11 42:9 46:21 52:4 53:12 <b>describe</b> 4:13 <b>described</b> 40:22 <b>describes</b> 45:13 <b>describing</b> 41:11 <b>description</b> 19:22 <b>descriptions</b> 49:17 <b>designed</b> 4:3,6 27:6 <b>Despite</b> 44:24 <b>destroy</b> 17:1 <b>detail</b> 35:16 <b>details</b> 5:12 <b>determine</b> 7:12 <b>determined</b> 5:3 <b>Detroit</b> 27:18 41:19 <b>devised</b> 21:16 <b>diarrhea</b> 17:3 <b>dictionary</b> 15:22 <b>difference</b> 31:15</p>
---	--	--	--	--

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 58

different 17:21 18:22 34:17 direction 21:8 41:1 55:10 disagree 40:25 disappointed 20:25 disclose 37:3 discuss 12:15 discussed 46:4 discussing 45:13 52:14 disgusts 52:15 disposal 7:2,22 8:1 26:15,16 dissecting 36:20 dissolved 7:18 distress 16:19 District 6:5 disturbance 16:19 disturbs 11:24,25 12:8 DNR 18:23 19:6 48:7 Doak 30:5,6 documentation 34:24 documents 6:6 doing 14:5 30:11 39:15 42:15 48:5 dollars 18:18 42:3 Donald 15:4 Donovan 50:7,25,25 Dorothy 31:17,18,19 dots 40:8,11,11 Dr 12:19 draft 3:7 4:9 5:13 6:24 24:20 25:4 28:11 36:4 drain 51:10 drainage 53:11 draw 37:13 drill 26:9 drilled 19:1 drilling 9:14 12:1 22:4 drinking 3:22 4:4 7:7,8 7:10,15,15,16,19,20 8:9,16,24 9:11 24:6 drunken-type 16:15 duty-bound 31:11 dying 49:6 dysfunctions 16:13 D-O-N-O-V-A-N 50:25 D-O-R-O-T-H-Y 31:20	38:18 52:24 earthquakes 18:22 19:8 30:20 easily 20:1 echo 31:22 economy 30:14 41:25 ecosystem 30:13 edges 41:23 educated 12:12 effect 18:15 20:6 effective 3:25 effectiveness 51:13 effects 16:7,10 either 21:8 25:1 Elaine 15:5 Elkhart 41:3 Elkins 2:8 3:9 emotional 51:2 employment 31:14 enable 51:21 encased 8:25 encompasses 30:15 Endangered 19:16 energies 52:21 energy 52:20 enforcement 51:18 engagement 50:1 Engineer 3:3 engineering 45:19 enjoyer 53:3 enlargement 16:23 ensure 4:6 9:8 ensuring 47:2 enter 5:18 54:1,4 entire 14:8 37:7 entitled 26:10 environment 4:14 14:3 31:15 38:8,22 39:20 environmental 3:3,4,6 3:9,10 6:21,22 12:5 14:5 17:11 23:22 29:21 32:21 36:24 37:17 38:7 42:9,21 43:14,17 44:3 45:16 45:23 46:14 48:14 48:20 49:23 50:2 environmentally 24:23 25:3,11 26:18 26:24 45:21 46:8 EPA 1:15 2:5,6,7,8,9 2:10 3:5,7,8,9,10,11 3:13 4:8,20 5:2,9,25 6:7,12 7:3 8:5 9:15 9:25 10:9,16 13:18 14:1 15:12,14 19:14	20:8,21 21:18 22:5 24:20 29:21 30:10 31:11,14 35:15 39:9 39:9,13 43:6 44:11 45:8 46:5,12,21 50:15,18 51:3,12,21 52:4 54:8 EPA's 5:1 epicenters 49:4 epidemiological 15:24 equal 47:8,11 Erie 27:12,13 error 15:8 38:12,13,17 45:19 errors 48:17,17,18 especially 36:11 established 10:13 estate 15:6 eternity 42:5 52:14 ethylbenzene 15:17 16:4 evaporite 19:21 evening 3:2 5:5 6:20 10:22 11:2,4 25:20 50:9 53:1 event 21:14 45:23 46:9 events 45:18 eventually 34:7 46:6 everybody 34:13 41:17,18,20 42:6 everybody's 11:1 evoked 16:11 exactly 34:20 43:9 exaggeration 36:22 example 13:11 excellent 19:23 exceptions 36:23 excluded 37:5 exemption 37:8 exerted 37:11 exist 18:24 36:15 existence 47:15 existing 8:6 36:9 exists 35:18 expect 18:14 37:7 expecting 39:7 experience 42:20 explanations 29:6 exploration 1:8 3:14 5:11 7:4 8:3 9:13,16 9:21 10:2,10,18 15:12 17:18 exposure 16:4,6,10,21 17:2,9,11 20:3 expressed 38:19 expressing 29:23	extended 6:9 extensive 46:13 extract 52:19 extraordinary 30:13 31:4 extreme 52:19,22 eyes 16:4,17	43:24 finish 27:17 finite 52:20 first 6:14 10:23 11:6 11:13,20 15:3 20:21 22:1 33:2 38:6,8,12 39:7 Fitch 12:2 24:11,12 five 10:8 37:13 floor 6:19 flow 9:23 13:14 19:23 flows 44:25 fluid 7:1 8:20,23 9:10 9:12 10:5 19:4 20:10 26:6 fluids 7:24 8:1,2 18:2 Fobes 40:1 42:16,17 42:18,18 45:5,7,7 folks 10:20,22 follow 20:18 51:7 followed 11:15 21:10 21:22 23:4 25:6,14 25:16 28:20,24 29:18 30:4 31:18 32:24 34:23 35:7 37:24 39:2,25 42:16 45:5 46:18 49:9 50:8 following 49:13 follows 34:6 forced 13:5 forcing 53:13 foregoing 55:8,11 forgive 33:12 form 5:17 6:16 34:8 forma 36:4 formal 10:21 54:2 formation 9:10,10 formations 8:18 formed 20:2 fortunately 43:24 forum 21:16,16,16,17 22:1 forward 6:12 54:7 found 3:19 15:15 four 11:5 23:7 27:16 37:19 40:5 Fox 49:22 fracturing 27:4 fragmentation 36:18 fragmented 36:16 Fred 28:24 29:18,20 frequent 46:22 53:2 fresh 30:13 31:4 32:20 47:1 49:4,6 freshwater 42:6 friend 52:3,4	
<b>E</b> E 55:1,1 earlier 25:20 30:24 31:8 45:25 49:10 earth 26:14 27:24 36:9			<b>F</b> F 55:1 faced 22:7,19 facilitator 2:9 3:11 facilities 40:14 fact 11:21 15:14 20:2 23:10 26:5 28:18 31:24 32:5 39:13 49:18 factor 19:19 factors 31:9 facts 5:2 factual 15:3 52:7 fail 46:6 fails 13:12 failure 15:24 19:5 25:22 27:1 46:7 failures 25:21 26:1 falls 32:7 family 14:21 35:24 far 12:25 14:14 21:4 34:1 farm 43:3 fault 18:23,25 19:2,3 federal 3:17,19,24 7:4 7:6,7,11 19:16 28:10 28:21 37:20 feel 4:25 13:4 39:15,19 51:22 52:23 feeling 49:18 feels 39:11 fees 22:22 feet 8:4,11,14,17 19:21 19:21 24:16 26:20 32:10 40:7,24 45:14 47:24 fen 40:18,19 49:25 Fidelity 18:8 field 15:16 Fifth 2:15 figuratively 52:21 filled 5:17 9:4 filling 35:23 filth 42:10 final 1:24 5:12,20 9:15 finally 19:18 financial 10:11 find 13:18 26:9 29:2		

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 59

<p>friends 29:23 43:1,3 fully 8:25 function 16:20 funded 44:8 funding 51:14,20 further 12:8 46:15 future 41:24 44:20 47:16 49:11 52:13 F-E-N 40:18 F-O-B-E-S 42:19 45:8</p> <hr/> <p><b>G</b></p> <p>G 21:23 gain 13:6,7 GAJAR 50:9 gallons 36:1 37:13,14 gamma 19:11 gas 7:25 12:1 13:5 22:12 26:8,11 37:4 39:18 42:4 gastrointestinal 16:19 gauge 9:8 general 28:2 32:1 44:7 generate 4:10 generations 32:16 49:11 52:13 Genie 44:23 gentleman 50:7,13 gentlemen 50:18 geological 20:2 30:22 Geologists 19:23 geology 8:5 19:18 geophysical 19:11 George 29:19 30:7 George's 31:22 getting 13:4 29:7 49:20 Gilbert 48:6 give 54:6 given 24:19,22 53:19 glacial 40:24 Gleichman 45:6 46:18 46:19,19 51:24,25 go 10:24 21:18 25:1,8 27:8,10 28:12,16 29:12 34:2 40:22 42:4 45:2 goes 24:12 27:12,12 27:18,18 40:20 41:3 44:10 46:15 48:10 50:12 going 10:23 11:3,4 12:24,24 13:1 14:14 21:4,5,20 22:19 24:10 26:5 27:3,4,10 28:12,13,16 29:4,24</p>	<p>33:18 34:3,3 36:4,20 39:20 40:4 41:1,6 42:2,3,13,13 50:6 52:19,22 good 3:2 6:20 34:8 39:12 40:8 50:9 53:1 government 47:7,10 48:5 52:9 Grand 23:8 41:5,6 grandchildren 20:13 32:19 grandparents 33:15 grant 14:2 45:9 gravel 40:24 great 27:11 32:17,19 46:10 50:16 51:10 greater 35:15 greatest 37:9,22 great-grandmother 33:14 Grobbe 12:19 gross 20:9 ground 8:1,11,14 40:7 44:24 45:14 53:11 groundwater 17:22 24:6 Group 8:13,15 35:11 guess 24:18 30:24 43:5 guidelines 46:12 guilty 20:8 guys 51:19 gypsum 20:3 G-A-J-A-R 50:10 G-L-E-I-C-H-M-A-N 46:20 51:25</p> <hr/> <p><b>H</b></p> <p>habitat 36:7,14,16,18 36:20 habitats 37:22 Hal 12:2 24:11,12 half 11:20 33:17 35:25 hall 22:1 Halliburton 37:1 hampered 51:13 hand 15:8 55:15 hands 33:10 happen 23:22 27:7 29:25 38:20 51:8 happened 13:9 25:22 32:8 45:25 48:2 53:4 happening 29:25 32:14 51:5 happens 21:15 27:7 52:3</p>	<p>hard 19:22 20:17 31:25 hardness 19:24,24 hazardous 22:3 headwaters 30:16 health 17:11 34:15 42:21 44:3 hear 39:8 heard 22:15 28:14 29:5 49:17 51:1 hearing 1:12,15 2:5,9 3:1,5,6,11,17 4:12 4:15,19 5:4,15,16,18 5:23 6:11 7:22 16:16 21:17 25:24,25 28:5 28:13 54:9 hearings 4:9,19 heart 17:14 heaviest 41:14 heavily 53:7 Hello 51:24 help 12:13,13 21:5 hemorrhage 16:22 hepatitis 16:21 hereunto 55:14 heritage 31:10 Hi 15:2 hide 33:6 high 16:5,6 19:4 hill 25:1 41:16 Hillary 51:24 Hills 22:6,11 24:25 30:12 31:21 Holcomb 15:7,9 hold 28:13 holding 32:22 holds 4:8 hole 26:5 27:2 Holly 21:10,12 honest 12:7 hope 22:21 32:17 52:16 Horning 25:17 28:23 28:25,25 horrible 13:15 hose 35:25 hours 13:12 25:13 35:23 http 6:8 huge 24:24 41:16 human 15:23 38:12,13 38:17,22 45:19 48:18 52:18 humans 17:1 hundreds 28:18 32:10 36:1</p>	<p>Huron 27:19 41:7 hydrocarbons 15:17 15:19 17:7,23 hyperplasia 16:23 H-O-L-L-Y 21:13 H-O-R-N-I-N-G 29:1</p> <hr/> <p><b>I</b></p> <p>identified 8:10 ignored 18:2 31:4 I 1:6 3:14 4:12 7:22 18:3 19:7 21:14 illegal 42:11 Illinois 6:23 impact 12:5 14:5 37:18 43:14,17 48:14 51:11 impacts 23:22 45:23 impervious 50:14 implemented 23:23 important 11:24 12:20 19:19 24:12 30:14 44:1,16 impose 7:9 inaccuracy 15:3 inadequate 49:18 inch 9:8 35:25 include 31:9 includes 7:19 including 17:13 18:16 19:10,11 43:16 incorporates 3:22 increase 42:13 increased 18:1 36:18 Indiana 19:15 41:3 indicate 49:23 indicated 5:21 48:23 indicates 54:3 individual 17:20 industrial 39:14 40:13 industry 12:5 13:6 30:20 37:4,4,7,11 46:21 47:10,12,14 inevitability 46:5 infestation 42:10 infested 41:8 influence 37:11 information 9:25 12:10,20 14:4 22:25 29:7,15 41:11 49:19 49:20 informed 12:13 49:13 Ingestion 16:18 ingredients 20:24 inherent 47:7,10 inhibitor 9:5</p>	<p>inject 7:1,24 8:2 9:16 19:3 injected 9:12,24 10:5 Injecting 47:13 injection 1:7 3:8,15,18 3:23 4:2,4,12 5:1 7:5 7:6,9,12,13,22,24 8:10,12,15,20,21,25 9:7,9,9,10,14,23 10:12,17 12:14,16 12:18,21,24 17:19 18:5 19:1,7 21:14 22:15,16,19 24:8,10 24:15 25:9,21 26:12 26:19,23 29:6,14,16 30:18 31:5 32:3,6 34:14 37:19 38:4 40:12 41:22 43:16 45:14,17 46:2,13,24 47:3,4,24 48:8,12,18 50:11 51:5 injections 39:6,22 injector 14:22 innocently 49:15 insecure 47:15 inside 32:18 instituted 47:8,10 insufficient 18:9 integrity 9:17 10:7 intended 4:21 intentional 49:1 intentionally 53:10,16 interest 4:10 interested 10:21 48:24 53:21 interval 8:13 invited 4:7 involve 44:1 involved 12:16 38:17 53:12 involving 53:9 IQ 17:10 Irish 22:6,11 24:25 30:12 31:21 irritant 16:17 irritate 16:4 issue 3:14 5:10 7:3 10:17 18:13 36:17 44:20 issued 3:17 9:15,21 issuing 35:20 I-N-G 29:1</p> <hr/> <p><b>J</b></p> <p>Jack 25:6 46:16,17 Jackson 1:3 3:15 4:15</p>
---	---	--	--	---

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 60

6:5,5 18:12 23:8 25:10 33:4 35:13 <b>JANE</b> 1:25 2:14 <b>January</b> 13:10 <b>jaundice</b> 17:4 <b>Jeffrey</b> 2:7 3:8 <b>Jennifer</b> 2:9 3:10 10:19 31:18 32:23 32:23,25 <b>jeopardize</b> 36:4 <b>jeopardizing</b> 41:24 <b>job</b> 39:12 42:15 45:8 50:16 52:17 <b>John</b> 39:2,25 40:2 50:9 52:14 <b>Johnson</b> 11:15 13:22 13:24,24 <b>Joseph</b> 21:25 41:3 <b>Judy</b> 13:23 14:11,12 <b>June</b> 3:25 6:10 54:8 55:15 <b>J-O-H-N-S-O-N</b> 13:25	<b>Ladies</b> 50:18 <b>laid</b> 22:22 <b>lake</b> 18:15,17 23:14,17 23:17,17,18,18 24:4 24:4,5 26:22 27:12 27:13,18,19 30:8 31:21 33:16 40:17 40:17 41:4 47:18 <b>lakefront</b> 18:16 <b>lakes</b> 23:15,18,19,22 24:3 27:12 30:16 32:17,18 46:10 51:10 <b>Lalitha</b> 30:5 <b>land</b> 31:23 36:12,15 42:11 43:3 52:10 <b>landowners</b> 17:20 <b>Lansing</b> 41:6 <b>larger</b> 46:10 <b>largest</b> 23:7 <b>Lastly</b> 31:13 <b>laughing</b> 11:22 <b>law</b> 37:20 <b>Lawrence</b> 15:7,9 <b>laws</b> 38:9,10 <b>layer</b> 8:17 32:12 <b>leakage</b> 12:17 26:25 <b>leaks</b> 9:20 <b>lease</b> 38:21 <b>leave</b> 52:12,12 54:7 <b>leaves</b> 47:15 <b>leaving</b> 52:22 <b>legal</b> 45:10 <b>Lenawee</b> 11:19 25:10 35:14 <b>lesions</b> 16:12 <b>letters</b> 17:24 <b>leukemia</b> 16:1 <b>level</b> 26:4 45:15 <b>levels</b> 16:5,14 26:5 <b>Library</b> 6:5 <b>lied</b> 34:24 <b>life</b> 31:24 38:14,23,23 44:21 52:18 <b>lifetime</b> 34:4 <b>life's</b> 52:17 <b>limestones</b> 8:18 <b>limit</b> 9:12 11:4 <b>limitation</b> 9:8 <b>limited</b> 8:12 9:7 <b>linked</b> 15:25 16:2 <b>liquid</b> 9:4 10:4 30:19 34:6 <b>list</b> 10:20 19:17 <b>listed</b> 17:5 <b>listen</b> 3:12 5:4 7:1	50:23 <b>listened</b> 11:19 <b>liter</b> 7:18 <b>literally</b> 52:20 <b>little</b> 4:18 13:7 40:8,11 40:21,25 <b>live</b> 30:2,8 33:5,13,17 33:17,18 36:7,11 37:22 42:25 43:1 44:18 47:18,19,21 49:4 50:3 <b>lived</b> 33:15,15,16 49:3 <b>liver</b> 16:7,20,23,23 <b>lives</b> 41:17 <b>local</b> 30:14 33:3,5 37:5 48:5 <b>locally</b> 43:22 <b>locate</b> 26:15 <b>located</b> 3:15 8:11 26:12 <b>location</b> 26:19 <b>Lodi</b> 39:4 <b>logs</b> 19:11,12 <b>long</b> 10:8 32:19 <b>longer</b> 33:19 <b>long-term</b> 16:7 <b>look</b> 32:15 40:6,14 49:5 <b>looked</b> 29:8 <b>looking</b> 13:19 23:21 24:10 37:21 47:22 <b>loss</b> 10:4 16:15,16 <b>lot</b> 21:6 23:20,20,23 24:1,5,18 36:15 39:13,17 40:4 <b>love</b> 50:4 <b>low</b> 16:13 17:13 18:22 25:2 <b>lower</b> 17:9 <b>lowermost</b> 8:8,16 <b>lowers</b> 20:6 <b>luck</b> 22:24	<b>map</b> 40:16 <b>Mark</b> 32:24 35:7,9 <b>married</b> 33:16 <b>marrow</b> 15:23 16:1,23 <b>Marsh</b> 28:24 29:18,20 29:20 <b>Marshall</b> 8:10 <b>Maryland</b> 18:9 <b>massive</b> 30:18 <b>material</b> 20:4 <b>matter</b> 37:1 <b>Maumee</b> 41:2 <b>mean</b> 12:11 27:3 32:4 38:16 43:11 49:21 <b>means</b> 22:17,18 27:2 37:12 43:10 51:10 <b>measures</b> 52:19,22 <b>measuring</b> 13:11 <b>mechanical</b> 9:17 10:7 <b>mechanism</b> 21:20,20 <b>medical</b> 15:22 47:1 <b>meet</b> 4:5 <b>meeting</b> 6:2 11:21 29:13,15 35:23 45:24,25 <b>meetings</b> 39:18 <b>member</b> 11:22 <b>members</b> 4:19 13:18 <b>membranes</b> 16:18 <b>memory</b> 16:15 <b>mess</b> 52:12 <b>met</b> 30:1 <b>Michael</b> 25:17 28:23 28:25 <b>Michigan</b> 1:2,14 3:15 3:19,25 6:5,6 7:5 22:13 23:7 26:9 28:5 28:21 30:17 35:11 37:10 40:20 41:4 42:7,20 44:17 47:5 52:18 55:3,5 <b>Michigan's</b> 37:12 <b>microphone</b> 10:24 11:14 <b>middle</b> 26:22 <b>migrate</b> 32:12 <b>migrating</b> 8:20 <b>migration</b> 12:23 26:6 27:1,5,8 <b>mile</b> 14:22 18:4,10 33:17 34:13 40:15 <b>miles</b> 32:18 <b>Miller</b> 2:6 3:6 4:13 6:14 6:19,20,21 18:7 20:2 28:15 <b>milligrams</b> 7:18	<b>million</b> 18:18 36:10 37:13,14 <b>mind</b> 53:5 <b>minds</b> 21:6 <b>Mindy</b> 2:18 55:5,21 <b>mineral</b> 19:23 <b>minimum</b> 19:11 <b>minute</b> 36:1 <b>minutes</b> 11:5 27:16 40:5 <b>mishaps</b> 39:21 <b>misleading</b> 43:9 <b>missed</b> 48:25 <b>mistakes</b> 45:20 <b>mixture</b> 9:4 <b>moderate</b> 16:14 <b>Moh's</b> 19:24 20:4 <b>money</b> 24:5 26:21 <b>monitor</b> 35:5 <b>monitored</b> 9:6,19 35:3 <b>monitoring</b> 18:1 21:3 21:5 53:15 <b>month</b> 12:20 <b>monthly</b> 10:1 <b>months</b> 16:8 24:16 <b>Motel</b> 24:14 <b>move</b> 9:10 48:12 <b>movement</b> 8:23 <b>mucosal</b> 16:22 <b>mucus</b> 16:17 <b>Mud</b> 23:14,17 30:8 <b>muddy</b> 36:14 <b>Muhich</b> 32:24 35:9,9 <b>mutagenic</b> 17:8 <b>M-A-R-K</b> 35:9 <b>M-A-R-S-H</b> 29:20 <b>M-U-H-I-C-H</b> 35:10
<b>K</b> <b>Kalamazoo</b> 13:9 23:9 41:4 <b>Kathryn</b> 46:18 47:17 <b>kidney</b> 16:1,20 <b>kids</b> 33:17 34:4,5 <b>kind</b> 24:11 32:5 42:10 42:11 <b>kinds</b> 51:20 <b>know</b> 12:6,9,19,25 13:2,3,3,4 14:14,23 15:20 21:3,4 23:25 28:20 30:1,11,11,12 30:12,18,24,25 31:8 32:14 33:23 34:16 34:20 36:8,25 37:19 38:9,12 39:7,21 40:5 42:23 43:8,12,19 44:11,17 46:4,23 47:21 48:15 51:12 51:18 52:3 <b>knowing</b> 21:6,7 <b>knowledgeable</b> 12:12 <b>known</b> 15:22 17:5,7 43:25 <b>knows</b> 12:25 <b>Kolon</b> 41:10 <b>Kurt</b> 45:6 46:17,19 <b>K-U-R-T</b> 46:19	<b>L</b> <b>laboratory</b> 15:25 <b>Ladd</b> 15:5,7 22:8,23	<b>M</b> <b>magnitude</b> 18:22 <b>mailed</b> 4:16 <b>maintained</b> 5:25 <b>major</b> 13:16 24:3 30:16 <b>making</b> 5:9 10:16,21 25:25 38:3 45:12 49:8 <b>malformations</b> 17:14 <b>malfunctions</b> 48:19 <b>man</b> 50:16 <b>Management</b> 39:18	<b>N</b> <b>name</b> 5:18 6:20 10:23 11:9,10 13:24 14:12 20:14,19 21:12,24 25:7,18 28:25 30:7 31:19 32:25 33:9 35:9 42:18,19 45:7 49:2 50:9 51:24 53:1 53:25 <b>names</b> 10:23 11:12 <b>Naphthalene</b> 15:18 16:25 17:5 <b>native</b> 49:10 <b>natural</b> 18:20 26:13 <b>nature</b> 4:18 40:17 <b>nausea</b> 16:15 17:2 <b>near</b> 19:1 43:1 <b>nearby</b> 8:6 18:3	

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 61

<p>near-failure 18:25 necessary 44:21 necrosis 16:24 need 21:19 33:11,12 36:15 38:16,23 43:12 needed 22:17 needs 14:8 44:9 46:14 negligence 20:9 neighbor 52:2,4 neighbors 29:22 nervous 16:21 network 43:23 neuro 16:2 neutron 19:12 never 20:25 24:9 43:25 48:10,16 New 2:16,16 news 49:5 Niagara 8:13,15 north 41:7 northern 23:12 Northstar 19:7 Norvell 13:25 23:5,10 23:11,13,15,18 24:24 25:9,19 26:11 26:22 29:17 30:8 47:18 48:4 nose 16:5 note 18:16 44:3 notice 6:13 19:14 notified 24:9 28:4,6 43:21 48:3,4 notifying 43:20 notorious 12:3 15:23 number 15:2 18:8 19:9 22:10 27:13 28:1 45:18 53:4 nurse 42:19 44:4</p> <hr/> <p><b>O</b></p> <p>observing 9:22 10:3 obviously 22:19 53:6 occur 39:21 53:11 odd 22:18 offended 39:13 office 3:12 39:18 Officer 1:15 2:5 3:5 offices 6:1 official 45:8 officially 4:25 53:24 officials 17:24 46:1 Ohio 18:19,23 19:6 oil 7:25 12:1 13:5,14 15:12,16 17:18 22:12,12 23:24 26:8</p>	<p>26:11 31:24 32:2,6 36:22 37:4,11,14 39:18 41:8 42:3,12 49:14,21 53:4 okay 11:16 20:17 27:17 40:15 41:22 42:18 46:17 48:24 50:6 old 33:23,23 34:3 oldest 37:21 once 44:23 48:11 50:16 Ontario 27:18 operating 10:8 operation 7:13 8:7 9:19 opinion 39:23 opportunity 4:20,24 10:14 24:13 50:19 53:19 oppose 39:6,23 opposed 15:9 25:9 52:21 optic 16:12 oral 4:22 order 3:1 11:13 ordinance 23:21 ordinances 24:1 Orvos 15:5 Ostermeier 2:9 3:10 6:15 10:20 13:22 14:10,18,25 21:10 21:22 23:3 25:5,14 27:15 28:23 29:18 30:4 31:17 32:23 35:7 37:24 39:1,25 42:16 45:5 46:16 48:22 50:6 52:25 53:18 ought 50:2 outcomes 17:12 outlet 23:14 outside 18:4 30:9 oversees 17:18 oversight 51:18 owners 15:5,6</p> <hr/> <p><b>P</b></p> <p>packer 9:2 pages 55:11 PAH 17:11 Palmer 22:8,23 Pam 15:1 20:19 Pamela 11:15,16 13:22,24 21:11,22 21:24</p>	<p>paper 33:4,5 papers 48:23 53:8,9 paralysis 16:5 parcels 18:17 parents 33:16 part 3:21,23 6:1 7:7 11:22,23 25:24 37:6 44:1 46:5 47:23,25 52:1 participated 39:17 participation 4:6 particular 11:13 12:15 24:7,21 36:8 parts 23:12 48:13 pass 9:17 23:8 passed 30:1 passionate 52:6 path 19:2 34:6 pathway 26:6 pay 46:25 48:20,21 pediatrician 11:19 penny 41:25 people 12:11 15:20 23:24,24 24:4,13 25:2 26:10 29:7,10 31:12 33:4 34:24 39:13 41:21 42:8 43:21 47:7,13 48:3 48:19,21 49:6,10 50:23,23 51:1 52:9 people's 21:6 perfect 13:11 perforated 53:10 period 5:14 6:9 19:5 permit 1:6 3:8,13,16 4:8,9,11,25 5:7,10 5:12,13,20 6:24,24 7:1,3,21,22 8:12 9:11,15,22 10:15,18 14:4,15 24:20,21 27:11,21 28:8,12,20 35:16,20 36:5,17 45:4,13,22 46:5,11 46:15 permits 12:1,4,7 14:2 30:10 31:16 39:24 45:9 permitting 4:4,7 19:10 20:9 person 11:13,23 12:3 14:19 Personal 41:21 Peter 2:10 3:11 14:19 14:25 20:14 petitioning 30:10 phenomena 32:1</p>	<p>pick 42:8 piece 40:9 pipe 13:13 27:5 pipeline 46:3,7 pipelines 36:19 46:1,6 pivotal 30:15 pixels 41:14 place 9:1 12:4 20:7 22:4 31:5 32:19 41:25 51:6,15 placed 12:18 15:11 Plaintiffs 17:15 18:6 planet 32:20 40:20 platform 26:22 play 45:11 plays 37:15 please 3:2 5:16 11:9 11:14 13:18 38:5,24 39:24 45:3 48:24 50:4 52:25 54:6 plug 10:11 point 17:16 18:6,19 29:13 43:5 political 47:6,9 51:14 politics 51:14 polluted 53:16 pollution 32:1 polycyclic 15:18 17:7 polyneuropathy 16:12 Pontiac 40:20 pool 35:24 porous 20:5 Portage 23:9 Porter 14:10,18,20 31:18 32:23,25,25 portion 5:4 7:17 23:13 possibilities 33:25 possibility 31:2 33:21 34:8 possible 8:8 11:1 15:9 39:21 possibly 16:25 potential 7:20 16:11 29:21 potentially 14:3 37:13 pounds 9:8 Powell 11:14,17,17 power 47:7,9 51:6 powers 51:8 ppm 16:18 practices 14:2 practicing 42:20 prairie 40:18,19 precautions 44:24 pregnancy 17:12 premature 17:13</p>	<p>Prenatal 17:9 presentations 4:22 preserve 50:19 pressure 9:6,7,9,18,23 9:24 13:11,13 19:4 27:7 42:14 presumption 26:10 pretty 36:9,20 prevent 8:19,22 23:24 previous 35:16 previously 53:17 priceless 44:20 pride 23:21 prior 54:8 pristine 47:23,25 48:13 private 48:20 pro 36:4 probably 26:21 37:10 problem 30:25 33:20 43:20 problems 18:10 34:15 34:16 proceeding 5:25 54:10 proceedings 55:8,12 process 4:7 19:10 49:8 processes 51:7 processing 40:14 producer 22:11,11,13 production 7:25 8:3 22:14 professional 39:8 professionals 29:4 program 3:18,23,25 4:3,6 5:2 7:5,7,12 46:13 prompted 22:7 promulgated 3:21 pronouncing 16:9 proof 46:25 propaganda 25:12 properties 17:9 18:11 18:12,16 property 15:5 proposed 1:5 3:13 4:8 4:11 6:25 7:23,23 8:7 10:15 31:3 40:12 42:23 43:2 44:10 proposes 7:3 proposing 34:10,12 34:19 Proposition 17:4 proprietary 37:2 protect 4:3,14 7:10 18:1 24:6,6 38:8,11</p>
--	--	--	---	---

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 62

38:11,22,23 39:14 39:20 46:21 51:21 <b>protected</b> 28:4 31:11 <b>protecting</b> 37:21 <b>protection</b> 3:4 6:22 7:14 24:1 32:21,22 38:8 47:2,9,11 50:2 <b>proud</b> 44:16 <b>provide</b> 4:19 <b>provided</b> 4:14,17 6:13 14:4 <b>provision</b> 47:1 <b>Psychoorganic</b> 16:11 <b>public</b> 1:5,12 2:10 3:5 3:12 4:6,7,9,10,15 4:19,19,20 5:14 6:9 6:12 10:21 11:5,9 13:1 20:23 21:16,17 28:13 48:25 53:19 <b>publication</b> 43:22 <b>publicly</b> 4:20 <b>pumps</b> 35:25 <b>pure</b> 22:24 41:22 <b>purpose</b> 10:13 <b>purposes</b> 7:2 <b>pursuant</b> 3:17,21 <b>pursue</b> 42:11 <b>put</b> 22:17 24:5 26:4,7 27:2,6 34:20 40:10 42:14 44:23 53:15 <b>putting</b> 25:9 27:24 33:22 52:20 <b>pyramidal</b> 16:13 <b>P-A-M</b> 20:19 <b>P-A-M-E-L-A</b> 13:25 21:25 <b>P-O-R-T-E-R</b> 33:1 <b>P-O-W-E-L-L</b> 11:18 <b>p.m</b> 1:13 54:10	<b>quite</b> 53:7 <hr/> <b>R</b> <b>R</b> 55:1 <b>radioactive</b> 22:3 <b>radius</b> 14:22 18:4,11 34:13 <b>Railroad</b> 17:17,25 <b>railroaded</b> 13:4 <b>Raisin</b> 14:16 18:15 23:10,11 24:16 27:12 39:5 41:10 47:19,23,25 48:1 <b>rape</b> 52:10,23 <b>Rapids</b> 41:6 <b>rare</b> 36:7 40:19 50:4 <b>rarest</b> 37:21 <b>Rasin</b> 26:20 <b>rate</b> 9:23 19:23 <b>ray</b> 19:11 <b>read</b> 6:14 53:9 <b>readings</b> 13:13 <b>real</b> 15:6 29:9 31:15 35:17 42:8 <b>really</b> 12:6,22 13:1 20:17 26:15 29:5 34:10 40:6 42:24 43:12 44:21,22 45:11 51:1 <b>reason</b> 32:11 38:6 39:7 45:20 <b>reasonable</b> 18:14 <b>reasons</b> 39:6 <b>receive</b> 5:20 13:20 <b>received</b> 5:6 6:4 17:19 49:19 <b>recharge</b> 41:12,15,16 <b>reclassification</b> 21:17 <b>reclassified</b> 21:15 <b>record</b> 5:8,18 6:2,15 20:16 24:12 25:8 29:12 43:8 53:20,24 54:2,3 55:12 <b>recorded</b> 4:22 <b>recording</b> 9:23 10:3 <b>records</b> 8:6 <b>red</b> 17:1 40:11 41:14 <b>reduced</b> 55:9 <b>referred</b> 49:10 <b>reforms</b> 19:9 <b>regarding</b> 3:13 <b>region</b> 5:25 30:15 <b>registered</b> 42:19 <b>registration</b> 5:17 6:16 43:7 53:24 <b>regular</b> 35:5 44:8 <b>regulation</b> 36:24 49:9	<b>regulations</b> 3:20,24 7:8 17:25 37:6 38:9 49:13 <b>regulatory</b> 4:21 <b>relate</b> 7:14 <b>related</b> 17:12 26:2 <b>relatively</b> 20:1 <b>relied</b> 42:1 <b>relies</b> 53:6 <b>relieve</b> 21:6 <b>rely</b> 12:11 <b>remediation</b> 53:13 <b>remember</b> 33:9 53:21 <b>remove</b> 20:15 <b>renewable</b> 52:21 <b>repeat</b> 24:11 29:1 <b>report</b> 9:25 18:23 19:6 <b>reporter</b> 2:18 4:23 6:18 11:10 55:5 <b>reporting</b> 1:25 2:14 10:3 <b>reports</b> 17:11 <b>represent</b> 55:11 <b>representative</b> 10:9 <b>representing</b> 3:5 <b>request</b> 21:13 24:19 25:3,25 28:8 33:2 38:3,4 45:21 <b>requested</b> 53:25 <b>requesting</b> 47:12 <b>require</b> 19:9 21:2 <b>required</b> 43:15,15 44:5 51:3 <b>requirement</b> 27:22 <b>requirements</b> 3:23 4:5 5:2 7:9 28:6,21 30:2 34:23 45:10 <b>research</b> 42:21 49:14 <b>resident</b> 11:18 31:21 39:4 53:2 <b>resistance</b> 34:7 <b>resistivity</b> 19:12 <b>resource</b> 26:9,13 37:10 44:16 52:20 <b>resources</b> 18:20 31:4 35:22 <b>respected</b> 19:16 <b>respond</b> 5:5 43:7 <b>responders</b> 12:11 <b>response</b> 5:20 43:6 44:13 <b>responsibilities</b> 10:11 <b>responsibility</b> 38:21 <b>responsible</b> 9:22 10:3 43:19 <b>responsiveness</b> 5:7	6:3 <b>rest</b> 29:8 42:4 51:16 <b>result</b> 7:25 45:19 <b>resulting</b> 31:3 <b>return</b> 46:17,17 <b>review</b> 6:4 <b>reviewed</b> 5:6 8:5 <b>right</b> 22:13 27:5,12,16 27:20,22 33:24 36:12 40:16,21 41:12 42:24 44:21 47:5 49:20 50:22 51:15 <b>rights</b> 51:11 <b>risk</b> 31:6 <b>risking</b> 38:24 <b>risks</b> 12:16 <b>river</b> 13:9 14:16 18:15 23:8,9,9,9,9,11 24:16 26:20 27:12 27:19 39:5 41:2,2,3 41:5,6,7,10 47:19,23 47:25 48:1 <b>rivers</b> 13:16 23:7 30:17 41:15,18 51:9 <b>road</b> 15:6,7 22:8 24:15 40:17 45:2 <b>rock</b> 8:18 18:24 27:3 <b>role</b> 30:15 <b>ROSE</b> 1:25 2:14 <b>rotate</b> 35:4 <b>round</b> 40:12 <b>rule</b> 36:24 37:1 <b>running</b> 23:11 40:16 41:5 <b>runs</b> 23:10 39:5 <b>ruptured</b> 13:13 <b>rural</b> 44:6,7 <b>Russell</b> 35:8 37:24 38:1,1 <b>Rzeznik</b> 1:15 2:5 3:1,2 53:23 <b>R-U-S-S-E-L-L</b> 38:2 <hr/> <b>S</b> <b>safe</b> 3:21 7:7,8,16 44:22 <b>safeguard</b> 28:17 <b>safeguarded</b> 31:12 <b>safeguards</b> 4:13 <b>safety</b> 44:6 <b>Saline</b> 53:2 <b>salinity</b> 20:6 <b>saltwater</b> 43:10 <b>sample</b> 34:17 <b>samples</b> 34:12 35:2,6	<b>Sandstone</b> 8:11 <b>Sanfacon</b> 29:19 30:4,7 30:7 <b>Saugatuck</b> 41:5 <b>saved</b> 26:21 <b>saying</b> 12:3 25:8 27:15 27:23 28:3 29:12 33:10 49:21 <b>says</b> 47:6 <b>scale</b> 19:24,25 20:4 40:15 <b>scary</b> 14:6 <b>Science</b> 48:6 <b>scientific</b> 39:10 45:9 49:18 <b>scientist</b> 2:6,7,8 3:7,9 3:10 6:21 <b>scope</b> 7:11 <b>scores</b> 30:16 <b>seal</b> 9:3 27:3 <b>seawall</b> 14:22 <b>second</b> 10:24 11:8,23 15:13 20:4 33:8 38:18 <b>secret</b> 20:24 <b>section</b> 3:20,21 47:6 <b>security</b> 47:8,11 <b>see</b> 28:8 29:22 32:8,13 33:11,13 34:1 35:1 40:10,22 44:13 48:16 49:5 <b>seen</b> 48:16 <b>seismic</b> 30:19 31:2 50:13 <b>sell</b> 48:9 <b>sense</b> 14:16 43:11 49:7 <b>sensitive</b> 24:23 25:3 26:18,24 45:21 46:8 <b>sentiment</b> 45:10 <b>separated</b> 8:15 <b>serious</b> 12:14 <b>seriousness</b> 12:21 <b>serve</b> 8:19 <b>session</b> 11:24 30:23 31:7 <b>set</b> 9:1,2 37:16 55:14 <b>SEV</b> 18:12,18 <b>seven</b> 32:18 35:12 49:11 <b>sewers</b> 24:5 <b>shale</b> 32:12 <b>shales</b> 8:18 <b>shame</b> 29:25 <b>shape</b> 34:7 36:9 <b>Sharon</b> 50:7,8,25
--	--	---	--	--



US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 63

<p>sheet 5:22 15:11,14 sheets 15:6 shocked 53:3,13 show 33:14,15 54:3 showing 40:7 shows 19:24 shut 13:14 side 33:11,13 Sierra 35:12 significant 4:10 36:23 42:22 43:2 45:18 sign-in 5:22,22 simple 21:2 single 12:3 41:25 sit 10:25 51:22 site 19:19 22:6 26:15 26:16,23 27:3 31:10 40:7 53:15 sites 38:14 40:13 41:13 sitting 40:23 50:20 situation 46:3 slated 22:14 sleeping 11:23 sodium 17:22 soft 20:1 50:14 softest 20:4 solids 7:18 solution 12:23 solvent 20:5 somebody 33:6,22 49:1 sorry 16:10 25:12 33:9 51:22 soundness 7:12 source 7:15 8:9,16 40:25 49:20 sources 4:3 7:10,14 7:19,20 8:24 9:11 14:7 30:20 42:5 south 40:21 space 9:3,6,18 speak 41:8 53:25 54:6 speaker 35:16 special 44:18 49:24,25 species 36:7 50:1 specifically 22:2 speeches 52:7 spell 11:10 spelled 20:14 23:6 30:8 spent 24:5 spill 48:6 spills 32:7 spina 16:3 spoil 52:11,11</p>	<p>spot 25:1 28:1 spotted 36:13 spread 12:25 21:4,5 spreading 14:15 21:7 St 21:25 41:3 staff 51:20 stage 42:23 standard 37:17,20 standards 44:7 start 9:14 34:15,15 42:15 started 24:10 35:23 state 1:2 3:18 7:5 10:12 11:9 12:1,2,19 13:16 15:4 17:5 18:25 19:13 28:4,6 28:21 55:3 stated 55:9 statement 5:15,16,19 6:14,17 50:10 statements 6:10 52:8 states 3:3 6:22 17:17 19:20 steel 9:2 32:9 step 52:8 stepped 25:16 stood 50:7 stop 44:11 51:4 stops 50:17 stress 18:25 stringent 4:5 strong 39:23 stronger 17:25 struck 11:21 structure 51:12 stubborn 44:19 student 44:4 studies 43:15 44:4 study 14:5 43:17 45:23 46:14 48:15 49:23 stuff 13:3 27:6 30:1 51:1 subdivision 18:17 subject 3:16 4:11 7:21 submit 5:13 10:5 submitted 5:24 15:11 50:10 submitting 53:21 substances 15:21 sufficient 19:3 suggest 20:8 suggested 50:15 suite 19:10 summary 5:7 6:3 15:6 Super 24:13 45:24,25</p>	<p>supervisor 23:5 supposed 12:12 21:8 sure 5:16,21 9:20 11:1 11:11 14:23 25:24 34:22,22 35:3 44:19 49:8 Surely 31:5 surface 8:11,14,25 18:3,13 20:11 21:1,7 32:8 41:20 45:15,23 surround 18:11 survey 30:22 53:14 suspect 26:20 sweet 36:2 41:21 Swezey 23:18 sworn 4:23 Sybil 41:10 sympathy 29:10 syndrome 16:11 system 13:12 16:22 S-A-N-F-A-C-O-N 30:8</p> <hr/> <p>T</p> <p>T 55:1,1 table 5:22 take 9:1 12:4 19:14 20:7 24:21 34:12 42:3 50:5,6 52:10 taken 23:20 24:4 32:4 35:2 40:5,9 55:8 talk 19:18 23:1 26:3 43:23 talked 28:14 talking 36:12,13,25 37:9 41:13 52:9 Tamara 35:7 37:24 38:1 tanks 53:11 targets 51:23 Taylor 21:10,12,12 technical 4:5 5:11 7:9 45:9,20 technologies 31:6 tell 4:24 10:14 24:13 28:5,9 33:18 47:20 telling 25:13 tells 50:22 temperature 20:7 teratogenic 17:8 term 43:9 terms 4:25 46:11 terrible 36:5 48:5 test 9:17 10:7 33:23 34:16 46:23 tested 9:19 33:25 testimony 4:23 24:19</p>	<p>24:22 testing 44:6,7 46:22 53:15 tests 10:9 Texas 17:17,19,24 thank 13:21 14:9,10 14:17,18 20:13 21:8 21:21 23:1 25:4,5 28:22,23 29:17,22 30:3 31:16 32:21,22 37:23 38:2,25 39:24 42:15 45:2 46:15 47:16 48:21 50:5,23 51:23 52:24 53:17 54:4,9 the's 22:22 thing 11:7,8 32:6 33:2 35:1 50:22 51:17 things 23:23 24:2 30:12 32:11 33:6 38:19 40:4 47:19 51:21 think 13:8,17 24:11,24 34:10,11 35:6,15,19 35:21 36:3,5,6 37:18 39:11,13 43:9,11,12 44:8,9,14 48:4 49:11 49:12,16 50:11,15 50:15 thinking 29:3 37:1 thorough 50:1 thought 28:7 39:9 thousand 26:20 thousands 17:19 36:1 three 37:19 throat 16:5 tied 33:10 Tiffin 41:2 till 40:24 Tim 14:10,18,19 time 10:23 19:5 20:23 23:20 26:4 31:12 40:9 44:5 45:1 50:16 Timothy 2:8 3:9 tiredness 16:14 Title 3:20 today 6:25 35:18 48:9 today's 7:21 told 20:12 22:2,16,21 26:17 28:11 Toluene 15:17 16:9 tonight 3:4 5:15 12:9 13:20 23:1 29:2,15 43:24 45:13 54:7 tonight's 3:16 4:12 top 22:11,11,13 40:24</p>	<p>41:15 total 7:18 8:3 totally 25:11 tour 40:6 tourism 53:7 town 22:1 33:5 towns 41:18 township 13:25 23:6 23:10,11,12,15 24:3 24:23,24 25:10,19 26:12 29:17 30:9 37:5 39:4 47:18,22 48:3,4,13 toxic 12:23 16:11,20 47:14 toxicity 15:21 tracers 34:19 tradition 32:15 tragedy 36:5 transcribed 6:18 transcript 5:23 6:2 transition 20:7 transparency 48:2 transported 22:5 traveling 38:15 treasure 32:21 treatment 47:1 tremendous 32:20 tremendously 14:8 tributaries 23:16 trouble 16:6 42:7 truck 32:7 trucked 32:5 trucking 31:25 true 55:11 trustee 14:1 truth 19:25 33:18 49:16 try 11:4 27:17 29:2 35:15 52:19 trying 26:7 33:6 50:16 tubing 9:1,3,4,18 turn 6:18 34:3 turned 52:16 turns 20:3 turtles 36:8,8,11,13,13 36:21 37:22 two 10:23 22:8,10,15 22:16 23:12 24:3,14 25:13 30:10,12,18 35:25 37:19 40:11 type 24:8 36:24 37:5,8 39:14 43:16 typewriting 55:10 T-A-M-A-R-A 38:2 T-A-Y-L-O-R 21:13</p>
---	---	---	---	---

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 64

<p align="center"><b>U</b></p> <p><b>UIC</b> 4:2 5:10  <b>Ulbin</b> 21:23 23:3,5  46:18 47:17,17  <b>underground</b> 1:7 3:7  3:18,22 4:2,3 5:1 7:2  7:4,6,10,11,14,15  8:9,16,24 9:11 10:17  44:25  <b>understand</b> 21:15  22:10 45:8 49:15  52:5,16  <b>unfortunately</b> 23:25  29:4  <b>unique</b> 36:7 40:17,18  40:23  <b>United</b> 3:3 6:22  <b>unnamed</b> 23:19  <b>unprotected</b> 47:16  <b>unsafe</b> 25:11  <b>unsurpassed</b> 30:13  <b>upper</b> 19:20  <b>upward</b> 8:20 12:22  27:1,8  <b>urine</b> 17:3  <b>use</b> 40:9 43:10  <b>U-L-B-I-N</b> 23:6 47:17  <b>U.S</b> 30:21,21</p>	<p><b>Wamplers</b> 23:17 24:4  40:17  <b>Wanda</b> 15:7  <b>want</b> 5:19 13:2 19:18  25:8 35:3 44:12  47:13  <b>wanted</b> 31:14 51:11  <b>Washtenaw</b> 51:25  <b>wasn't</b> 44:5 48:3 49:1  <b>waste</b> 7:2 17:18,23  22:3,17 26:15,16  30:19 46:2 47:14  52:23  <b>watch</b> 49:22  <b>watching</b> 44:20  <b>water</b> 3:22 4:4 7:7,8  7:10,15,16,16,19,20  8:9,16,24 9:11 12:17  14:7,7 18:1,4,13  20:3,5 24:7 30:13  31:4,23 32:20 34:12  35:17 36:3,14 37:9  37:12 41:19,20,22  42:2,5,7 44:6,15,20  44:22,25 46:22,24  47:1,3 49:4,6,24  50:4 51:11 52:11,11  52:17  <b>watershed</b> 41:12  47:20  <b>Wawczak</b> 2:7 3:8  <b>way</b> 22:21 29:13 34:7  35:13 39:10 44:22  45:1  <b>ways</b> 27:8  <b>weak</b> 20:1  <b>weakness</b> 16:15  <b>website</b> 6:7  <b>weekly</b> 9:24  <b>weight</b> 17:13  <b>Welcome</b> 3:2  <b>wells</b> 4:4 7:9,13 8:3,6  12:14,16,18,21,24  17:16,19 18:1,4,21  22:14,15,16,16,18  22:20 24:15 25:9,21  26:8,8,11,12,19 28:1  29:14 30:10,19 31:3  31:24 32:2,3,6,7  33:23,23 34:2,3,4,14  35:2 36:19,19 37:14  37:18,19 38:4,4,13  38:15,16,24,24 39:6  39:22 40:8,12 41:8  41:14,21,22 43:16  43:16,18 44:7 46:3</p>	<p>47:4,12,13 48:13,18  51:5 53:5,15,16  <b>weren't</b> 48:3  <b>West</b> 1:8 3:14 5:10  6:25 7:3,23 8:2 9:13  9:16,21 10:2,10,18  15:4,11 19:19 20:24  26:17 28:19 34:21  35:3 46:1 48:14 53:9  53:10,14  <b>wetland</b> 24:25  <b>wetlands</b> 23:16 46:7  <b>we'll</b> 25:15 28:18  44:19  <b>we're</b> 13:4 22:22 24:7  26:11 27:23 28:3,12  28:13 36:4 37:9  41:13 42:2,13,13  44:19 45:13 51:14  52:9,14  <b>we've</b> 23:23 28:10  48:16,22 50:12  <b>WHEREOF</b> 55:14  <b>white</b> 19:22  <b>wide</b> 21:4  <b>wife</b> 49:9 53:8  <b>wish</b> 5:15 48:12 54:4,6  <b>withdraw</b> 37:12  <b>WITNESS</b> 55:14  <b>witnessed</b> 10:9 11:21  <b>Wolf</b> 40:17  <b>Womack</b> 2:18 55:5,21  <b>wonder</b> 48:2 49:19  <b>wonderful</b> 49:17  <b>wondering</b> 51:3  <b>wonderland</b> 49:24  <b>word</b> 4:22,22  <b>work</b> 21:21 37:7 38:9  48:8  <b>works</b> 41:10  <b>world</b> 31:9 36:3 37:10  37:23 40:18 42:6,7  49:5  <b>worry</b> 43:4  <b>worth</b> 18:18 42:3  <b>Wotton</b> 53:1,2  <b>writer</b> 6:24  <b>writing</b> 43:7 44:13  53:22 54:7  <b>written</b> 5:13,24 6:10  26:17 50:10 54:5  <b>wrong</b> 16:9 33:12  38:10  <b>wrote</b> 17:24  <b>www.epa.gov/regio...</b>  6:8</p>	<p><b>W-O-T-T-O-N</b> 53:2</p> <p align="center"><b>X</b></p> <p><b>xylene</b> 15:18 16:17,19</p> <p align="center"><b>Y</b></p> <p><b>year</b> 45:25 51:16  <b>years</b> 10:8 16:8 17:20  20:10 28:18 31:22  35:25 36:10 40:11  42:1,2 45:2 49:3  <b>yesterday</b> 53:8  <b>York</b> 2:16,16  <b>Youngstown</b> 18:21  19:8</p> <p align="center"><b>Z</b></p> <p><b>zone</b> 8:12,15,19,21  19:20  <b>zoning</b> 23:21 24:1</p> <p align="center"><b>\$</b></p> <p><b>\$1,451,920</b> 18:13  <b>\$25,000</b> 10:13 18:7</p> <p align="center"><b>#</b></p> <p><b>#22</b> 6:25 7:23</p> <p align="center"><b>0</b></p> <p><b>08937735</b> 18:8</p> <p align="center"><b>1</b></p> <p>1 6:10 47:6,6  <b>1P22</b> 15:11  <b>1st</b> 54:8 55:15  <b>1-800-825-3341</b> 1:25  2:17  10 19:25  <b>10,000</b> 7:17  <b>100%</b> 31:1 34:22  <b>1000</b> 24:15 47:24  <b>10011</b> 2:16  12 18:22  <b>1200</b> 27:20  <b>124</b> 3:23  <b>12536</b> 15:5,7  <b>13</b> 24:16  <b>13%</b> 12:17  <b>144</b> 3:23  <b>146</b> 3:24  <b>147.1151</b> 3:20  17 4:16  <b>1984</b> 4:1  <b>1987</b> 48:6  <b>1998</b> 53:10</p>	<p align="center"><b>2</b></p> <p><b>2,950</b> 8:4  <b>20</b> 13:12  <b>200</b> 16:18 36:10 40:24  42:1  <b>2005</b> 18:2  <b>2010</b> 13:10 21:25  <b>2011</b> 55:15  <b>2012</b> 1:13 4:16 54:8  <b>2066</b> 19:21  <b>226</b> 8:11  <b>23</b> 1:13  <b>2436</b> 8:17  <b>244</b> 6:5  <b>25</b> 3:25 18:18  <b>25th</b> 13:10  <b>2634</b> 19:21  <b>2662</b> 8:13  <b>2950</b> 45:14</p> <p align="center"><b>3</b></p> <p><b>3.5</b> 19:25  <b>30</b> 11:3 20:10 31:22  49:3  <b>3032</b> 8:14  <b>342</b> 18:17  <b>35</b> 11:3</p> <p align="center"><b>4</b></p> <p><b>40</b> 3:20 22:15 36:19  <b>40-some</b> 22:18  <b>42</b> 22:14 34:2  <b>45</b> 22:14,16</p> <p align="center"><b>5</b></p> <p><b>5</b> 5:25  <b>58</b> 32:18</p> <p align="center"><b>6</b></p> <p><b>60</b> 35:24  <b>615</b> 37:6  <b>65</b> 17:4  <b>682</b> 9:7</p> <p align="center"><b>7</b></p> <p><b>7:00</b> 1:13  <b>72</b> 41:18</p> <p align="center"><b>8</b></p> <p><b>8</b> 24:13 45:24,25  <b>8:42</b> 54:10  <b>80</b> 2:15 34:3 36:19  <b>80%</b> 48:17  <b>85</b> 17:21</p>
<p align="center"><b>V</b></p> <p><b>valid</b> 49:16  <b>valuable</b> 35:22  <b>value</b> 18:12  <b>values</b> 45:11  <b>various</b> 8:18 15:16  <b>Vast</b> 15:24  <b>vicinity</b> 8:9 36:12  <b>Victoria</b> 11:14,16,17  <b>views</b> 4:21 29:23  <b>Village</b> 23:13  <b>Vineyard</b> 18:15,17  33:16 47:18  <b>Vinyard</b> 23:17 24:4  <b>violate</b> 47:4  <b>Virtually</b> 41:17  <b>vision</b> 16:16  <b>visited</b> 22:2  <b>visual</b> 16:11  <b>volume</b> 9:24  <b>volunteers</b> 35:4  <b>vomiting</b> 17:3  <b>V-I-C-T-O-R-I-A</b> 11:18</p> <p align="center"><b>W</b></p> <p><b>W</b> 6:5  <b>Walter</b> 22:1</p>				

US Environmental Protection Agency - May 23, 2012  
FINAL - Public Hearing

Page 65

<div>9</div> <div>9:00 11:6</div>				
-----------------------------------	--	--	--	--

